

UGANDA PROTECTORATE.

---

**ANNUAL**

**MEDICAL AND SANITARY REPORT**

FOR THE

YEAR ENDED 31ST DECEMBER, 1925.

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**PRICE: Shs. 6.**

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Published by Command of His Excellency the Governor.

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ENTEBBE:

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1926.



DIRECTOR OF MEDICAL AND SANITARY SERVICES,  
ENTEBBE, UGANDA,  
*31st May, 1926.*

SIR,

I have the honour to submit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State, the Medical Report on the health and sanitary condition of the Uganda Protectorate for the year 1925, together with the Returns, etc., appended thereto.

I have the honour to be,

Sir,

Your obedient servant,

**J. HOPE REFORD,**  
*Director of Medical and Sanitary Services,  
Uganda Protectorate.*

THE HONOURABLE

THE CHIEF SECRETARY TO THE GOVERNMENT,

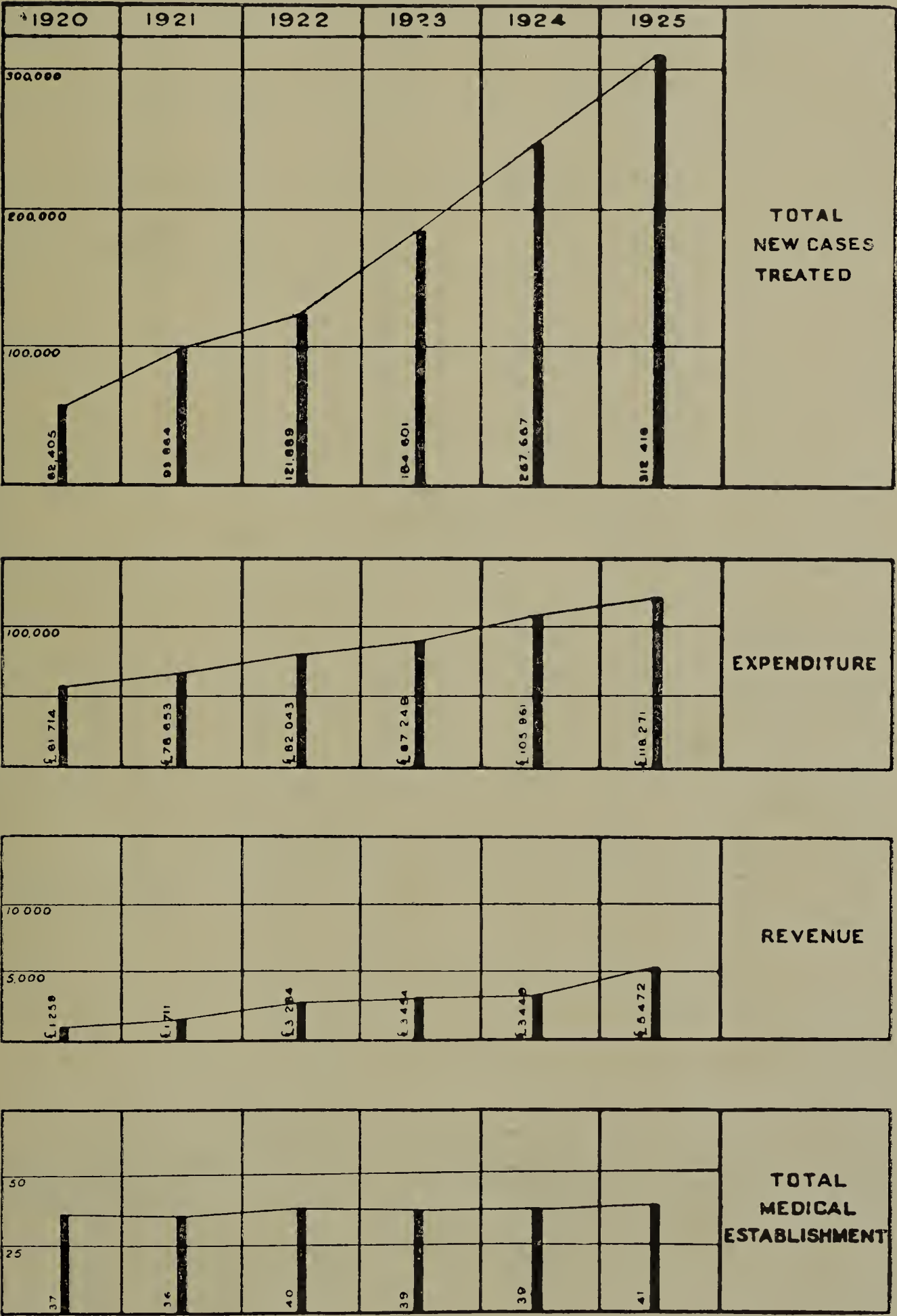
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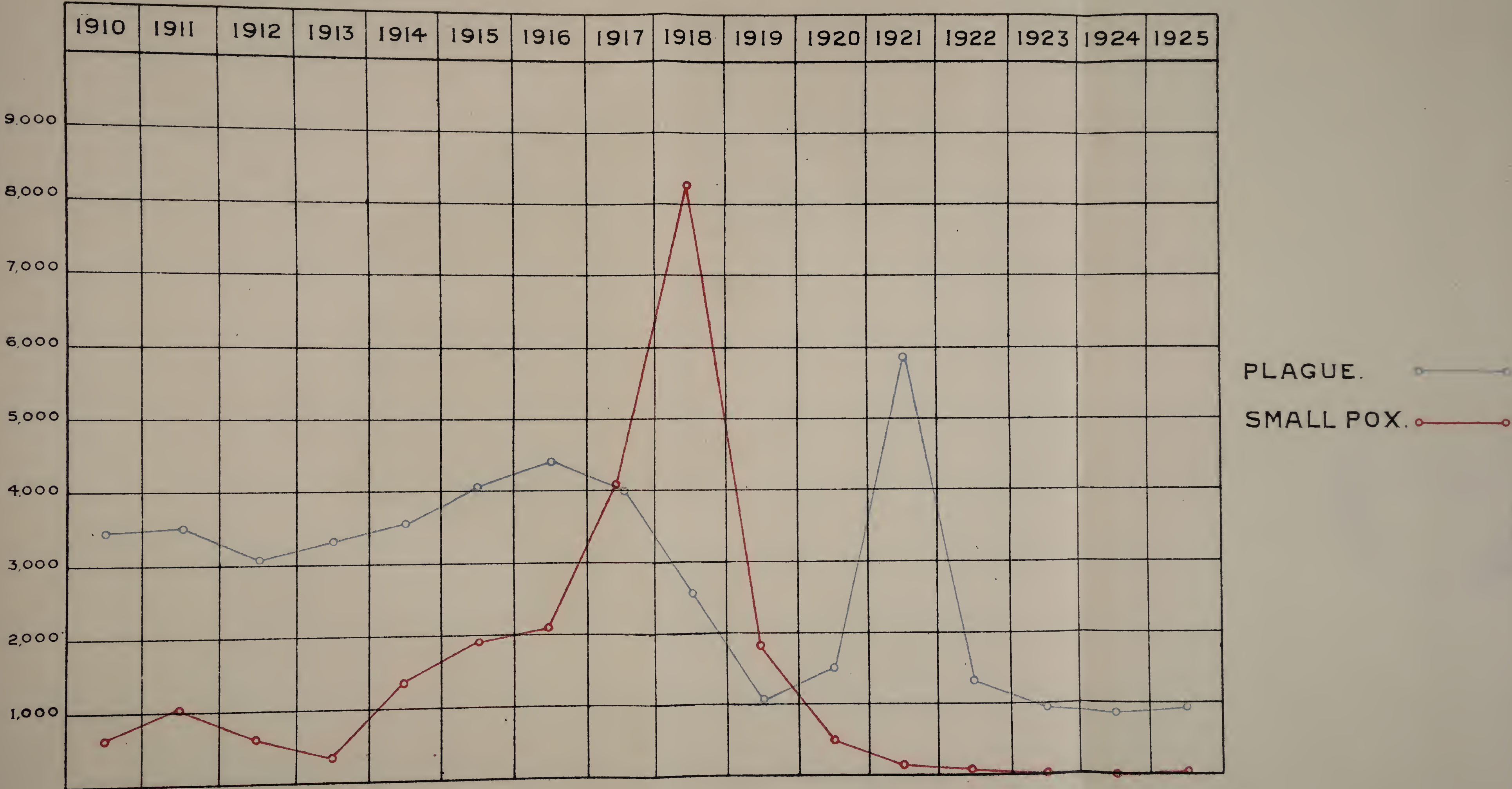


COMPARATIVE GRAPHS  
OF  
Cases Treated, Expenditure, Revenue and European  
Establishment.





DEATHS.





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UGANDA PROTECTORATE.

ANNUAL MEDICAL REPORT

FOR THE  
YEAR ENDED 31st DECEMBER, 1925.

SECTION I.

ADMINISTRATIVE.

(A) Staff.

THE ESTABLISHMENT FOR 1925 AS SANCTIONED IN THE ESTIMATES WAS AS FOLLOWS:—

EUROPEAN.

Director of Medical and Sanitary Services.	1 Confidential Clerk.
Deputy Director of Medical (N.) Service.	1 Office Superintendent.
Deputy Director of Medical Service.	1 Clerk.
Surgical Specialist.	1 Storekeeper.
6 Senior Medical Officers.	1 Pharmacist.
25 Medical Officers.	1 Superintendent, Mulago.
1 Dental Surgeon.	1 Laboratory Assistant, Mulago.
2 Matrons.	1 Superintendent of Native Hospital and Asylum, Hoima.
17 Nursing Sisters.	2 Assistant Superintendents and Dispensers.
Deputy Director of Sanitary Service.	1 Supervisor of Native Inspectors.
1 Senior Sanitation Officer.	3 European Sanitary Inspectors.
1 Sanitation Officer.	
Director of Laboratory.	2 Laboratory Assistants.
1st Assistant Bacteriologist.	

ASIATIC.

1 Assistant Surgeon.	1 Assistant Storekeeper.
2 Senior Sub-Assistant Surgeons.	1 1st Grade Clerk.
23 Sub-Assistant Surgeons.	4 2nd Grade Clerks.
6 Compounders.	5 3rd Grade Clerks.
2 Nurses.	6 4th Grade Clerks.
2 Sanitary Inspectors.	

NATIVE.

A varying number of Native Attendants including:—

Hospital and Dispensary Attendants, etc.	Vaccinators.
Isolation Hospital and Camp Attendants.	Plague Inspectors.
Clerks and Interpreters.	Sleeping Sickness Inspectors and Gland
Menial Staff.	Examiners.

Appointments, Changes, etc., in Staff.

Appointments:—

Dr. G. A. Sloan, Medical Officer, on probation	...	...	...	24- 1-25
Dr. S. Forrest, Do	...	...	...	24- 1-25
Dr. G. Louw, Do	...	...	..	18- 4-25
Dr. J. M. Gray, Do	...	...	...	30- 4-25
Dr. K. Lumsden, Do	...	...	...	30- 4-25
Dr. A. H. Maclean, Do	...	...	...	30- 4-25
Miss A. E. Fichat, Nursing Sister, on agreement	...	..	...	17- 9-25
Miss J. F. Sneddon, Do	...	...	..	25- 9-25

*Appointments (continued) :—*

Mr. C. H. H. Lloyd, Conservancy Officer, Municipal Department, transferred to Medical Department on appointment as Assistant Superintendent and Dispenser	...	...	...	...	9- 1-25
Mr. W. O. Tindall, Assistant Superintendent and Dispenser	...	...	...	...	12-11-25
Mr. F. C. Prashar, Sub-Assistant Surgeon	...	...	...	...	5- 1-25
Mr. L. R. Laroya, Do	...	...	...	...	7- 1-25
Mr. Pindi Das, Do	...	...	...	...	4- 7-25
Mr. D. C. Uberoi, Compounder	...	...	...	...	4- 2-25
Mr. Jai Singh, Do	...	...	...	...	18- 2-25
Mr. R. M. Aliana, Do	...	...	...	...	18- 5-25
Mr. A. D'Mello, Do	...	...	...	...	17- 6-25
Miss J. Rusteau, Asiatic Nurse	...	...	...	...	13- 2-25
Mr. H. R. A. Dias, Clerk	...	...	...	...	1- 1-25
Mr. Harnam Singh, Do	...	...	...	...	14- 1-25
Mr. C. M. P. Fernandes, Do	...	...	...	...	14- 1-25

*Acting Appointments :—*

Dr. G. R. H. Chell, Deputy Director Medical Service, acting Deputy Director Medical (Native) Service	...	1-12-25	...	End of year
Major R. J. A. Macmillan, D.S.O., T.D., Senior Medical Officer, acting Deputy Director Medical Service	...	1- 1-25	...	8- 2-25
Dr. W. L. Peacock, Senior Medical Officer, acting Surgical Specialist, European Hospital, Kampala	...	1-12-25	...	End of year
Dr. J. H. Neill, Medical Officer, acting Senior Medical Officer, Jinja	...	1- 1-25	...	22- 6-25
Dr. J. P. Mitchell, O.B.E., Medical Officer, acting Senior Medical Officer, Mulago	...	31- 3-25	...	End of year
Dr. M. Martin, Assistant Bacteriologist, acting Director of Laboratory	...	1- 1-25	...	21- 6-25
Miss N. M. Adams, Nursing Sister, acting Matron, European Hospital, Kampala	...	11- 3-25	...	End of year
Miss D. M. Ivers, Nursing Sister, acting Matron, Mulago General Hospital	...	23-11-25	...	End of year
Mr. F. G. Caldwell, Clerk D.M.S.S' Office, acting Office Superintendent	...	2- 4-25	...	22- 9-25
Do acting Superintendent and Dispenser	...	1- 1-25	...	6- 1-25
Do acting Medical Storekeeper	...	7- 1-25	...	15- 2-25
Mr. C. H. H. Lloyd, Assistant Superintendent and Dispenser, acting Superintendent Mulago Hospital	...	16- 2-25	...	15-11-25
	...	3- 2-25	...	4-10-25

*Promotions :—*

Mr. Mela Ram, Compounder to Sub-Assistant Surgeon	...	...	1- 1-25
Mr. E. F. X. Fernandes, Compounder to Sub-Assistant Surgeon	...	...	1- 1-25
Mr. Dhirat Ram, Compounder to Sub-Assistant Surgeon	...	...	1-11-25

*Appointments terminated :—*

Dr. A. T. Schofield, Temporary Medical Officer part time	...	...	15- 3-25
Dr. A. C. Stanley-Smith, M.C., Do Do	...	...	29- 3-25
Mrs. M. S. Wilson, Nursing Sister	...	...	27- 4-25
Mr. C. P. Thacker, Sub-Assistant Surgeon	...	...	9- 4-25
Mr. S. M. Hussen, Compounder	...	...	30- 4-25
Mr. C. M. P. Fernandes, Clerk	...	...	15- 9-25

*Resignations :—*

Mrs. E. da Rocha, Asiatic Nurse	...	...	...	12- 2-25
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*Transfers :—*

Dr. S. M. Vassallo, Medical Officer, to Zanzibar as Surgical Specialist	...	...	28- 5-25
Mr. W. V. Kendall, Sanitary Inspector, to Municipal as Conservancy Officer, Jinja	...	...	1- 6-25

*Reversions :—*

Mr. Hukam Singh, I.O.M., on secondment from Indian Medical Department (Military) reverted to his unit	...	...	...	25-12-25
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*Retirements :—*

Dr. R. A. L. van Someren, Senior Medical Officer	...	...	...	31-10-25
--	-----	-----	-----	----------

*Invalidings :—*

Dr. C. P. Burges, Medical Officer	...	...	...	30- 6-25
Mr. Mangal Sain, Sub-Assistant Surgeon	...	...	...	18- 7-25

*Deaths :—*

Mr. C. P. Andrews, Sub-Assistant Surgeon	...	...	...	31- 3-25
--	-----	-----	-----	----------



*Leave* :—The following were on leave during the period stated opposite their names :—

Major G. J. Keane, D.S.O., Deputy Director Medical (Native) Service	...	6-12-25	...	End of year
Dr. G. R. H. Chell, Deputy Director Medical Service	...	1- 1-25	...	31- 1-25
Dr. H. L. Duke, O.B.E., Director of Laboratory	...	8- 4-25	...	End of year
Mr. C. H. Marshall, Surgical Specialist	...	1- 1-25	...	13- 6-25
Dr. R. A. L. van Someren, Senior Medical Officer	...	21- 4-25	...	30-10-25
Dr. W. L. Webb, Senior Medical Officer	...	1- 1-25	...	13- 6-25
Dr. W. L. Peacock, Senior Medical Officer	...	20- 7-25	...	End of year
Dr. S. M. Vassallo, Medical Officer	...	1- 1-25	...	27- 5-25
Dr. N. Bligh-Peacock, Medical Officer	...	29-11-25	...	End of year
Dr. R. G. Griffin, Medical Officer	...	1- 1-25	...	27- 5-25
Dr. S. W. T. Lee, Medical Officer	...	1- 1-25	...	16- 2-25
Dr. A. T. L. Kingdon, Medical Officer	...	31-10-25	...	End of year
Dr. C. P. Burges, Medical Officer	...	22- 3-25	...	30- 6-25
Mr. G. S. Bateman, Dental Surgeon	...	21- 3-25	...	1-11-25
Miss E. M. Pratt, A.R.R.C., Matron	...	29-11-25	...	End of year
Miss D. M. Ivers, Nursing Sister	...	29-11-25	...	End of year
Miss N. M. Adams, Nursing Sister	...	19- 4-25	...	28-11-25
Miss A. Miles, Nursing Sister	...	28- 1-25	...	13- 9-25
Miss W. A. Shambrook, Nursing Sister	...	29-11-25	...	End of year
Mrs. M. S. Wilson, Nursing Sister	...	1- 1-25	...	27- 4-25
Mr. H. T. Bott, Office Superintendent	...	1- 1-25	...	31- 1-25
Mr. P. J. L. Waters, Medical Storekeeper	...	25- 2-25	...	12-11-25
Mr. H. G. Smith, Superintendent, Mulago	...	10- 2-25	...	1-10-25
Mr. A. E. Baker, Laboratory Assistant, Mulago	...	13- 8-25	...	End of year
Mr. A. D. Karkhanis, Senior Sub-Assist. Surgeon	...	1- 1-25	...	13- 2-25
Mr. Hukam Singh, I.O.M., Sub-Assist. Surgeon (seconded from I.M.D.)	...	25- 9-25	...	24-12-25
Mr. Ram Chand, Sub-Assistant Surgeon	...	1- 1-25	...	21- 5-25
Mr. Mangal Sain, Do	...	1- 1-25	...	17- 7-25
Mr. Ahmed Din, Do	...	10- 4-25	...	5-11-25
Mr. K. J. Raja, Do	...	1- 1-25	...	26- 3-25
Mr. S. R. Mahindra, Do	...	1- 1-25	...	5- 6-25
Mr. A. V. S. Rao, Do	...	25- 2-25	...	13- 8-25
Mr. Faquir Chand, Do	...	4-11-25	...	End of year
Mr. P. K. K. Menon, Sub-Assistant Surgeon, I.M.D.	...	1- 1-25	...	16- 1-25
Mr. Nur Mohamed, Sub-Assistant Surgeon	...	2-12-25	...	End of year
Mr. Mela Ram, Do	...	28- 8-25	...	End of year
Mr. E. F. X. Fernandes, Do	...	17- 6-25	...	3-12-25
Mr. Ahmed Din Ahmedi, Compounder	...	8- 5-25	...	6-11-25
Mr. Dharm Chand, Do	...	13- 3-25	...	3- 7-25
Mr. C. Moniz, Clerk	...	1- 1-25	...	19- 6-25
Mr. U. B. da Lima, Do	...	30-12-25	...	End of year
Mr. J. C. D'Souza, Do	...	1- 1-25	...	13- 2-25
Mr. S. X. Martyris, Do	...	7-10-25	...	End of year
Mr. F. X. D'Mello, Do	...	28- 1-25	...	End of year
Mr. Sant Singh, Do	...	26- 2-25	...	End of year
Mr. Hans Raj, Sanitary Inspector	...	12- 8-25	...	End of year

### (B) Financial.

#### ACTUAL EXPENDITURE FOR THE YEAR.

##### PERSONAL EMOLUMENTS :—

	£	s.	cts.
Administrative Staff; Specialists; Medical Officers; Laboratory Staff and Sub-Staff for Suppression of Sleeping Sickness; Venereal and Epidemic Diseases; Dentist; Nursing Staff; Pharmacist; Indian Medical Assistants; Native Attendants; Menial Staff; and Miscellaneous Allowances	69,033	11	80

##### OTHER CHARGES :—

Medical, Surgical and Dental Stores	16,355	7	45
Renewals of Furniture and Equipment of Hospitals	2,188	17	16
Upkeep of European and Asiatic Hospitals	1,334	13	56
Upkeep of Native Hospitals	7,196	16	26
Sleeping Sickness Clearings and Upkeep of Camps	442	6	85
Sanitation Division	2,438	1	74
Laboratories Division	384	0	16
Miscellaneous Services (including Travelling and Motor Bicycle Allowances, Passages, Internal Transport, Upkeep of Motor Ambulances and Asylum, etc.)	18,897	18	78

TOTAL OTHER CHARGES £49,238 1 96.

TOTAL £118,271 13 76

## REVENUE.

The total amount of revenue collected as hospital fees, sales of medicines and surgical stores, and registration fees, was as follows:—

	£	s.	cts.	£	s.	cts.
Hospital fees, sales of medicines and registration fees ...	4,587	11	14			
Re-imbursement from Uganda Railway on account of medical services ...	885	0	00			
	<hr/>			TOTAL ...	£5,472	11 14
					<hr/>	

## SECTION II.

## PUBLIC HEALTH.

## (A) Vital Statistics.

(1) The population, births and deaths for the five Kingdoms—Buganda, Busoga, Bunyoro, Ankole and Toro are shown in Tables A—G.

The total population of these five Kingdoms from which native returns are received is 1,505,188, representing nearly one half of the total population of Uganda Protectorate, which is recorded as 3,145,449. (*See Table B. Native Populations*).

The *Death Rate* shows a satisfactory decline for 1925, the rate being 19·34 per 1000 as compared with 21·58 per 1000 last year. The total deaths numbered 29,109 this year as against 31,792 in 1924. This is the lowest death rate that has ever been recorded for Uganda.

The *Birth Rate* shows a correspondingly satisfactory increase, the rate being 27·94 per 1000 as compared with 26·75 per 1000 last year. The total births numbered 42,056 as against 39,407 in 1924. This is the highest birth rate hitherto recorded for Uganda.

The total births exceeded the total deaths by 12,947.

The total number of *Still-Births* was 5,538, a decrease of 105 from last year.

The *Still-Birth Rate* (*i.e.* % of still-births to total deaths and still-births) was 11·63%, as compared with 12·52% for 1924.

The recorded *Infantile Mortality Rate* for the Protectorate is approximately 257 per 1000. The rate for Buganda is recorded as 157·17 per 1000 compared with 179·4 for this Kingdom in 1924.

(2) Bunyoro still remains the one Kingdom where the death rate (22·44) exceeds the birth rate (14·24); the figures show a declining birth rate, the rate this year being 14·24 per 1000 as against 15·77 per 1000 in 1924 and an improved or diminished death rate the figures being 22·44 per 1000 as against 25·89 per 1000 last year.

The still-births numbered 675.

(3) In Buganda the improvement noted in last year's statistics was maintained, the birth rate being 19·43 per 1000, and exceeding the death rate which was 18·11 per 1000. Unfortunately the number of still-births are markedly increased from 992 in 1924 to 1,187 in 1925.

The most striking feature of these Vital Statistics for the year, which on the whole must be regarded as favourable, is the marked excess of births over deaths representing an increase of population from this cause of 12,947, and the progressive manner in which such excesses have been maintained since 1921 when the total deaths exceeded the total births over the whole Protectorate. (*See Table D.*)

The vital question of native populations upon which the future progress of this country is so largely dependent and which in recent years has caused much justifiable anxiety would cease to be one of disquietude or concern if (*a*) this progressive excess of births over deaths can be maintained, (*b*) if the excessive still-birth rate particularly in Bunyoro and Toro can be checked, and (*c*) if the outbreak of grave epidemics can be prevented or effectively controlled. These problems in native medical work should continue to be the chief objectives of medical endeavour in coming years as they are to-day.



TABLE A.—TABLE OF DEATHS FOR THE FIVE DISTRICTS OF BUGANDA, BUSOGA, BUNYORO, ANKOLE AND TORO FOR THE YEAR 1925.

CAUSE OF DEATH.

County.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Influenza	G.S.M.	Fever	Sleeping Sickness	Plague	Small-pox	Measles	Syphilis	Gonorrhoea	Dysentery	Diarrhoea	Leprosy	Cancer	Tuberculosis	Muhingo or Bihingo, etc.	Dropsy	Chest Complaints	Fits	Paralysis	Abscess	Wounds and Injuries	Snake Bite	Child-Birth	Other Causes	Total Deaths	Still-Births
Buganda	518	3	3,258	..	149	3	8	593	884	44	158	130	212	356	83	121	1,998	86	1,117	67	16	89	201	4,361	14,455	1,187
Busoga	...	...	216	1	285	3	20	512	193	168	403	78	23	12	102	127	650	56	261	36	7	18	79	1,834	5,084	498
Bunyoro	...	...	116	...	...	...	2	73	78	30	131	11	27	52	37	14	661	10	61	13	11	4	21	731	2,240	675
Ankole	...	...	1,650	...	...	...	15	625	11	21	62	5	82	430	141	15	27	21	85	10	8	11	85	733	4,229	922
Toro	...	6	118	...	...	...	18	345	89	54	11	45	103	234	145	132	155	15	29	18	16	22	61	976	3,101	2,256
TOTALS	1,976	9	5,358	1	434	6	63	2,148	1,255	317	765	269	447	1,084	508	409	3,491	188	1,553	144	58	144	447	8,635	29,109	5,538

TABLE B.—NATIVE POPULATION—BIRTHS, DEATHS AND RATES PER 1,000 FOR PROVINCES OR DISTRICTS FOR WHICH RETURNS MADE, AND PERCENTAGE OF STILL-BIRTHS TO TOTAL BIRTHS AND STILL-BIRTHS.

	BUGANDA.	BUSOGA.	BUNYORO.	ANKOLE.	TORO.	TOTALS.
Population*	798,052	235,672	99,784	256,562	115,118	1,505,188
	Births (living)	Births (living)	Births (living)	Births (living)	Births (living)	Births (living)
	Deaths	Deaths	Deaths	Deaths	Deaths	Deaths
Rates per 1,000	15,511	10,810	1,422	7,956	6,354	42,056
	19,43	45,87	14,21	31,01	55,20	27,94
Still-births per cent of total Births and Still-births	1,187 = 7.10	498 = 4.40	675 = 32.18	922 = 10.38	2,256 = 26.19	5,538 = 11.63

NOTE.--The total population of the Uganda Protectorate is recorded as 3,145,449.  
\*Figures taken from Blue Book, 1924.

TABLE C.

SHOWING THE NUMBER OF BIRTHS, DEATHS AND STILL-BIRTHS IN THE SAME FIVE DISTRICTS FOR THE LAST SEVEN YEARS.

**BIRTHS (LIVING).**

Years	BUGANDA	BUSOGA	BUNYORO	ANKOLE	TORO
1919	9,512	6,918	1,284	5,518	3,731
1920	12,265	9,005	1,597	6,529	3,167
1921	13,050	9,829	1,602	7,095	3,872
1922	12,481	8,792	1,539	7,382	4,322
1923	14,479	9,892	1,626	6,816	3,863
1924	14,914	9,751	1,510	7,554	5,678
1925	15,514	10,810	1,422	7,956	6,354
TOTAL ...	92,215	64,997	10,580	48,850	30,987

**DEATHS**

1919	15,221	10,053	3,345	7,388	3,907
1920	14,469	6,980	2,609	6,033	2,260
1921	13,761	11,312	2,599	6,206	1,976
1922	13,939	5,839	2,430	5,879	2,450
1923	15,103	7,698	2,482	5,205	2,193
1924	14,877	6,456	2,480	5,225	2,754
1925	14,455	5,084	2,240	4,229	3,101
TOTAL ...	101,825	53,422	18,185	40,165	18,641

**STILL-BIRTHS**

1919	1,009	319	638	750	1,767
1920	1,127	484	953	773	1,478
1921	1,169	487	993	780	1,504
1922	1,102	483	967	775	1,739
1923	1,120	545	907	748	1,498
1924	992	540	770	1,218	2,123
1925	1,187	498	675	922	2,256
TOTAL ...	7,706	3,356	5,903	5,966	12,365

TABLE D.

SHOWING INCREASE OR DECREASE OF BIRTHS OVER DEATHS DURING THE LAST SEVEN YEARS.

Years	BUGANDA	BUSOGA	BUNYORO	ANKOLE	TORO	Total Increase	Total Decrease
1919	— 5,709	— 3,135	— 2,061	— 1,870	— 176	—	12,951
1920	— 2,204	+ 2,025	— 1,012	+ 496	+ 907	212	—
1921	— 711	— 1,483	— 997	+ 889	+ 1,896	—	406
1922	— 1,458	+ 2,953	— 891	+ 1,503	+ 1,872	3,979	—
1923	— 624	+ 2,194	— 856	+ 1,611	+ 1,670	3,995	—
1924	+ 37	+ 3,295	— 970	+ 2,329	+ 2,924	7,615	—
1925	+ 1,059	+ 5,726	— 818	+ 3,727	+ 3,253	12,947	—
Increases	—	11,575	—	8,685	12,346	15,391	
Decreases	9,610	—	7,605	—	—	—	



TABLE E.

SHOWING THE NUMBER OF BIRTHS AND RATES PER 1,000 OF THE POPULATIONS IN THE SAME FIVE DISTRICTS FOR THE LAST SEVEN YEARS.

Years.	Buganda.		Busoga.		Bunyoro.		Ankole.		Toro.		Totals.	
	Births (living).	Rates per 1,000	Births (living).	Rates per 1,000	Births (living).	Rates per 1,000	Births (living).	Rates per 1,000	Births (living).	Rates per 1,000	Births (living).	Rates per 1,000
1919	9,512	12·02	6,918	27·93	1,284	13·85	5,518	20·69	3,731	29·58	26,963	17·69
1920	12,265	15·50	9,005	36·36	1,597	17·23	6,529	24·48	3,167	25·11	32,563	21·36
1921	13,050	16·77	9,829	44·15	1,602	16·21	7,095	28·24	3,872	32·95	35,448	24·14
1922	12,481	16·03	8,792	39·49	1,539	15·57	7,382	29·38	4,322	36·78	34,516	23·51
1923	14,479	18·34	9,892	45·01	1,626	18·81	6,816	26·98	3,863	32·82	36,676	24·86
1924	14,914	19·02	9,751	43·60	1,510	15·77	7,554	29·71	5,678	48·73	39,407	26·75
1925	15,514	19·43	10,810	45·87	1,422	14·24	7,956	31·01	6,354	55·20	42,056	27·94

TABLE F.

SHOWING DEATHS AND RATES PER 1,000 OF THE POPULATIONS IN THE SAME FIVE DISTRICTS FOR THE LAST SEVEN YEARS.

Years.	Buganda.		Busoga.		Bunyoro.		Ankole.		Toro.		Totals.	
	Total (Deaths).	Rates per 1,000	Total (Deaths).	Rates per 1,000	Total (Deaths).	Rates per 1,000	Total (Deaths).	Rates per 1,000	Total (Deaths).	Rates per 1,000	Total (Deaths).	Rates per 1,000
1919	15,221	19·22	10,053	40·59	3,345	36·09	7,388	27·71	3,907	30·98	39,914	26·19
1920	14,469	18·28	6,980	28·18	2,609	28·15	6,033	22·62	2,260	17·92	32,351	21·22
1921	13,761	17·68	11,312	50·81	2,599	26·31	6,206	24·70	1,976	16·81	35,854	24·42
1922	13,939	17·91	5,839	26·23	2,430	24·60	5,879	23·40	2,450	20·85	30,537	20·80
1923	15,103	19·13	7,698	35·06	2,482	25·67	5,205	20·60	2,193	18·63	32,681	22·15
1924	14,877	18·97	6,456	28·87	2,480	25·89	5,225	20·55	2,754	23·63	31,792	21·58
1925	14,455	18·11	5,084	21·57	2,240	22·44	4,229	16·48	3,101	26·94	29,109	19·34

TABLE G.

SHOWING THE NUMBER OF STILL-BIRTHS AND STILL-BIRTHS PER CENT OF BIRTHS IN THE SAME FIVE DISTRICTS FOR THE LAST SEVEN YEARS.

Years.	Buganda.		Busoga.		Bunyoro.		Ankole.		Toro.		Totals.	
	No. of Still-Births.	Per cent.	No. of Still-Births.	per cent.	No. of Still-Births.	Per cent.	No. of Still-Births.	Per cent.	No. of Still-Births.	Per cent.	No. of Still-Births.	Per cent.
1919	1,009	9·59	319	4·40	638	33·19	750	11·96	1,767	32·12	4,483	14·25
1920	1,127	8·23	484	5·10	953	37·37	773	10·58	1,478	31·81	4,815	12·88
1921	1,169	8·22	487	4·72	993	3·82	780	9·90	1,504	27·97	4,933	12·21
1922	1,102	8·11	483	5·20	967	38·58	775	9·50	1,739	28·69	5,066	12·79
1923	1,120	7·18	545	5·22	907	35·80	748	9·88	1,498	27·94	4,818	11·61
1924	992	6·23	540	5·24	770	33·77	1,218	13·87	2,123	27·20	5,643	12·52
1925	1,187	7·10	498	4·40	675	32·18	922	10·38	2,256	26·19	5,538	11·63

(B) General Remarks.

The total number of cases treated at Government hospitals, dispensaries, sub-dispensaries, treatment centres and labour camps during the year under review was 312,416 with 1,102 deaths, a satisfactory progressive increase over last year's figures which were 257,677 new cases with 742 deaths. This means that almost 10% of the total population of the Protectorate came under treatment during the year.

This year the total attendances, *i.e.*, new cases and re-attendances, were 1,610,513. This figure forms an index of the volume of native medical treatment that has been carried out.

The attached graphs (Plate I.) showing the number of new cases treated in 1925 compared with those in the preceding five years indicate the progressive expansion that has taken place in native medical work during this period. Anti-venereal work and the extension of sub-dispensaries throughout the country have played a prominent part in this expansion. The concurrent increases in medical expenditure and revenue and in our medical establishment are also shown in these graphs over the same period.

Corresponding advances have been made in preventive medicine, notably in the diminution of Smallpox and Plague, and in Sleeping Sickness control, also in European hospitals, in Asiatic hospitals and in laboratories which will be referred to under their respective sections.

The accompanying graph (Plate II.) illustrates the remarkable diminution which has taken place during the past four years in the incidence of Plague and Smallpox which in former years exacted so heavy a toll upon the native population of the Protectorate.

The International Commission of the League of Nations comprising an eminent body of Scientists under the chairmanship of Dr. Duke, our Director of Laboratories, who has been seconded for this purpose, is now working in Uganda with their base at the extended Entebbe laboratory on problems of research in connection with the transmission and control of Sleeping Sickness which are justly regarded as problems of international importance.

The Uganda Laboratory Annual Report has been issued as a separate Report.

## COMMUNICABLE DISEASES.

### (1) MOSQUITO OR INSECT-BORNE.

*Malaria*.—20,635 cases with 48 deaths were treated as against 12,905 cases with 25 deaths in 1924.

Diagnosis whenever possible was confirmed by the microscope and the following classification resulted:—

<i>Type.</i>		<i>Cases.</i>		<i>Deaths.</i>
Benign Tertian	... ..	2,313	...	1
Sub-Tertian	... ..	5,778	...	29
Quartan	... ..	38	...	—
Mixed infection	... ..	843	...	—
Chronic malaria	... ..	853	...	4
Unclassified	.. ..	10,810	...	14

Malaria is by far the most prevalent disease amongst Europeans and Asiatics, both official and non-official.

*Blackwater Fever*.—(See special report by Major Macmillan, D.S.O., Appendix No. I.)

It will be seen from Major Macmillan's valuable report that 81 cases with 22 deaths are recorded as against 70 cases with 23 deaths last year. So long as Malaria maintains its position as the most prevalent disease amongst Europeans and Asiatics so long will Blackwater Fever have a high morbidity rate.

*Relapsing Fever*.—659 cases with 18 deaths occurred.

Last year 852 cases with 12 deaths were treated and it was anticipated that owing to the large amount of movement of labour which would take place during 1925 this disease would increase to a great extent both in incidence and in spread.

This fear has fortunately not been realised and for this the sanitary supervision at labour camps is largely responsible.

No reports were received as to this disease being other than tick-borne in this Protectorate.

*Trypanosomiasis*.—(See Special Report by Specialist Officer, Sleeping Sickness. Appendix VI.)

On Lake Victoria the policy of extirpation has been aimed at but carrying it into effect is fraught with great difficulties.

No cases of Sleeping Sickness have been found except in the endemic area of Mjanji. It is considered however that in certain areas the limits of safety in contact between man and fly have been exceeded, and the Medical Officer, Lake, on taking up his appointment at Jinja reported that conditions there were highly conducive to spread of Sleeping Sickness. Work on the Lake has been concentrated there and detailed recommendations submitted to the administration for action.



No further active measures of reclamation have been undertaken as it has not yet been possible to consolidate what has been won.

In other parts of the Protectorate the policy is one of control and has been pursued with considerable success especially in the Acholi area of Gulu District. A Medical Officer was appointed for Madi in August and treatment centres opened on each side of the Nile. In East Madi further removals of population from the southern part of the area have been advised.

In Chua there has been no advance of Sleeping Sickness.

In the West Nile District where the disease appears to be quiescent it cannot be dealt with by the present staff.

In the Western Province while the Katwe infected area is practically free from the disease, the Bwamba area requires more attention than has been possible to give it.

In the Eastern Province no work has been possible save near Mjanji—the disease appears to be endemic in the Budama District.

There is urgent need for more staff if Sleeping Sickness in Uganda is to be adequately dealt with.

*Undulant Fever*.—Nil cases were reported as against 12 cases with nil deaths last year.

## (2) INFECTIOUS OR EPIDEMIC DISEASES.

*Beri-Beri*.—Nine cases with one death are reported this year; last year seven cases and no deaths were recorded.

*Cerebro-Spinal Meningitis*.—Returns from all sources record 325 cases with 174 deaths as against 148 cases with 106 deaths in 1924.

This disease was epidemic at the end of 1924; it started in October of that year and lasted till the end of April, 1925, when the incidence gradually lessened up to October after which month no cases were recorded. The Western Province was mainly affected.

*Dysentery*.—2,812 cases with 331 deaths were treated as against 1,178 cases with 45 deaths last year. In addition to these cases 347 cases with 47 deaths were treated by the Medical Officer in charge Uganda Railway Extension, and native returns record a further 317 deaths from this disease.

The classification of the 2,812 cases is as follows:—

Amoebic	...	565	cases	...	61	deaths
Bacillary	...	1,241	cases	...	227	deaths
Unclassified	...	1,006	cases	...	43	deaths

The majority of the Dysentery cases have originated in the labour camps (apart from the Railway), and more specially among the Banyaruanda, a tribe living in the southern portion of the Western Province and the adjacent Belgian Congo.

Much of the Dysentery among the labour has been caused by indifferently cooked food, especially maize flour frequently eaten by the porters on their journey to their work, a journey sometimes occupying some 10 to 14 days under very indifferent conditions. Other factors contributing to the outbreak have been (a) change in the nature of the food, (b) change in environment, (c) lack of fresh vegetables at times, (d) contamination of food by dust, flies, etc., (e) contaminated drinking water.

These influences were most marked in connection with the first drafts from the West Nile for the railway construction, many of whom arrived at their destination suffering from dysenteric symptoms.

In connection with these two sources of labour, the Banyaruanda and the West Nile, reference to the district medical returns show that by far the greater number of cases of Dysentery other than labour recruits are returned from the districts in which these tribes live.

With regard to the West Nile District the underlying cause may in some cases have been due to infection with *Schistosomiasis Mansoni* since investigations made two or three years ago showed that some 40% were so infected. In the case of the



Banyaruanda tribe their high rate of infestation with *Ankylostomes* is to be borne in mind as a possible contributory influence in impaired resistance.

The dieting and general housing conditions on the road down are now being reorganised and improved, and the central camps and railway construction camps are being thoroughly reorganised and supervised in regard to their housing, feeding and drinking arrangements. Efforts are now being made to replace imported labour from remote susceptible tribes by local labour as far as possible, and it is hoped that a great reduction in the incidence of Dysentery and other diseases may follow these improved conditions.

*Labour Conditions.*—The necessity for improved labour conditions in Uganda has now become a question of primary importance both from medical and economic considerations. The medical aspects of this question are admirably stated by Major Keane, D.S.O., Deputy Director of Medical (Native) Service, in his Memorandum on the Relationship between Medico-Hygienic Considerations and Labour Conditions. (See Appendix No. III.)

Much time and unremitting effort will be required to introduce and establish the necessary reforms indicated in this report, but it is satisfactory to record that many of the measures recommended at its conclusion have already been initiated, and the remainder are I think accepted on all hands as fundamental desiderata and are receiving careful consideration with a view to putting them into effect. An extensive scheme for permanent labour camps at Kampala and other centres and for improved conditions for temporary labour camps throughout the country was approved before the end of the year.

Medical arrangements for the Extended Railway Construction Camps included provision of one, sometimes two, Medical Officers, three Sub-Assistant Surgeons and some 35 native dressers during the year. The medical report of Dr. Macleod, the Medical Officer in charge (See Appendix No. V.), is highly satisfactory considering the difficulties in staff, supplies and organisation that were encountered at the outset. In spite of the hygienic drawbacks attending railway construction in the tropics coupled with the importation of highly susceptible labour from remote districts and the constant danger of epidemics the sick and death returns are highly satisfactory for natives as well as for Europeans and Asiatics. The average daily off duty percentage of 2.58 for natives is a remarkably low figure under such conditions, with shifting drafts of susceptible labour, and the death rate of 21.7 per 1000 compares favourably with the general death rate of the surrounding district of Busoga.

*Enteric Fever*—(See special report by Dr. Neilson, Acting D.D.S.S., Appendix No. II.)

35 cases with 4 deaths are recorded as against 11 cases with 3 deaths the previous year. Classified as follows:—Typhosus 19, Paratyphoid A. 11, Paratyphoid B. 1, and type not defined 4.

*Erysipelas*.—Only 12 cases with 1 death occurred, 48 cases with no deaths were reported in 1924.

*Gonorrhoea*.—4,560 cases with 7 deaths. Last year 4,871 cases with 14 deaths were recorded.

*Syphilis*.—36,589 cases with 83 deaths were treated at all stations as against 34,051 cases with 84 deaths last year. In addition native returns record 2,148 deaths from this cause.

*Yaws*.—5,871 cases with 2 deaths were treated as compared with 7,377 cases with 8 deaths the previous year. Treatment by intravenous injections of salvarsan substitutes or by intramuscular injections of Bismuth Sodium Potassium Tartrate was carried out with excellent effect. One of the best results of this quick treatment of Yaws is that the confidence of the surrounding native population is gained and they become much more willing to report any sickness and to undergo treatment for other diseases.

*Anti-Venereal Treatment*.—(See Special Report by S. M. O., Mulago, Appendix No. IV.)

Excellent work has been carried out at Mulago Native Hospital during the year. In the present stage of its development this extensive permanent hospital is a creditable and highly organised institution of wide activities, of great usefulness and widespread popularity.



It will be noted from the Senior Medical Officer's report on Mulago that the volume of anti-venereal work carried out at Mulago Hospital and Mulago units was maintained during the year but that little advance on the expansion of the previous few years is to be recorded. Dr. Webb correctly points out that this rapid rate of expansion could not be expected to be progressive; that many other activities in general diseases, and notably the unfortunate Dysentery epidemic in the latter half of the year engaged much of the attention of the staff both at Mulago and its units and at labour camps; that great improvements in the hospital wards and grounds were effected during the year and a number of valuable buildings added; that consolidation of their organisation and internal administration was carried out. It is to be assumed that in an effective anti-venereal campaign in a given locality the number of cases available for treatment would tend to diminish rather than increase after a certain point.

Dr. Webb also refers to the restriction in the amount of salvarsan substitutes available for intravenous injection which is the method chiefly favoured by the natives. Treatment with salvarsan substitutes has been carried out at all hospitals and dispensaries to the full extent of our supply of these drugs, but with our limited resources selection of the more infective cases had to be made for the free issue of the more costly substitutes. Wherever it was found possible to do so without detriment small charges have been made to recoup a proportion of their cost, but cases requiring special drugs are never denied their benefit if unable to pay. Increased provision (£8,000) has been made for 1926, and with the reduced cost of the newer substitutes, particularly of Neo-treparsinan, a very much more liberal distribution of these special drugs will be possible.

Regarding the use of Bismuth Synthetics or Metallic Bismuth for Syphilis and Yaws our reports from Medical Officers have been variable. Most of the district reports are favourable both as to their efficacy and popularity. From a few district stations and from Mulago unfavourable reports have been received owing to the pain caused by intramuscular injection deterring patients from re-attendance, and the widespread use of this cheap form of medication has consequently been greatly restricted. It is hoped that this difficulty may now be surmounted by the adoption of the method of deep subcutaneous injection of metallic Bismuth, as advocated by Dr. Balfour, Col. Harrison, and Dr. Hanschell, which is relatively painless.

To enable us to cope more effectively with the expanding volume of native medical work including anti-venereal treatment throughout the country the necessity for our having a full and efficient staff of well-trained native medical assistants is becoming increasingly apparent. The volume of work both in treatment and preventive medicine is already quite beyond the capacity of our European or Asiatic staff and considerations of economy and policy indicate that the bulk of routine native work should be undertaken by trained natives themselves.

Organised medical training of natives has hitherto not been possible except for the few undergoing higher medical training at Makerere. At Mulago and most of the district hospitals a number of natives have been turned out as attendants and dressers after a somewhat haphazard course of practical work in clinics and wards. While many of these partially trained attendants have proved very useful when working under close supervision much difficulty has been experienced in providing reliable and capable native assistants for charge of sub-dispensaries or hospital wards, and our native medical work is becoming much handicapped in consequence.

To meet this situation it is proposed to institute organised systematic medical training of natives at Mulago, and the matter has been fully considered during the year. Provision has been made in 1926 Estimates for increased teaching staff, materials and other facilities, and it is hoped that systematic courses of training may be commenced early next year.

*Goundou*.—Two cases with nil deaths.

*Influenza*.—10,633 cases with 13 deaths, last year there were 12,402 cases 8 deaths.

Most of the cases occurred in the Eastern Province where the epidemic (7,027 cases) was mild in type.

*Plague*.—947 cases with 869 deaths are recorded.

Cases, sporadic and epidemic, were limited to the Buganda Kingdom and the Eastern Province. (*See Acting D.D.S.S.' report, Section III.*)



Six cases were treated with Mercurochrome Soluble but the results were disappointing as five of the cases died and the sixth case which recovered did not receive treatment until the third day of illness.

Treatment by Salvarsan substitutes should be resorted to wherever facilities exist and cases are seen in time.

*Smallpox.*—13 cases with four deaths are recorded from all sources and of these four cases with one death were treated in Government Hospitals.

The practical elimination of Smallpox is very gratifying and goes far to prove the protection afforded by the lymph supplied from the Entebbe Laboratory. 96,970 vaccinations were performed of which 61,238 were recorded as successful.

Reference to the records of Plague and Smallpox in former years, as indicated in the Table appended below, shows the heavy toll in human life from which the country has suffered year after year through the prevalence of these diseases. The progressive decline of Plague and particularly of Smallpox during the past five years affords striking testimony to the value of preventive measures of control against these devastating diseases and the efficacy of protective vaccination. (See accompanying graph, Plate II.)

In our relative immunity at present from these grave epidemics, their danger should never be lost sight of as any relaxation of sanitation measures or the protection afforded by vaccination and inoculation would sooner or later be followed inevitably by renewed outbreaks.

PLAGUE			SMALLPOX	
Year	Cases	Deaths	Cases	Deaths
1910	Cases not recorded only deaths.	3,623	Cases not recorded only deaths	637
1911		3,734		1,044
1912		3,100		519
1913		3,292		337
1914		3,725		1,390
1915		4,028		1,941
1916		4,384		2,118
1917		4,031		4,178
1918		2,493		8,270
1919		1,022		1,840
1920	1,362	1,732	506	578
1921		5,871		89
1922		1,305		12
1923		914		10
1924		801		1
1925	947	869	13	4

*Measles.*—187 cases with one death were treated as compared with 172 cases with nil deaths in 1924.

*Tuberculosis.*—41 cases with three deaths are recorded as against 102 cases with 15 deaths last year.

*Leprosy.*—585 cases came in for treatment and of these five died, last year 551 cases with four deaths were reported.

*Type of Leprosy.*—

Nodular	...	...	...	...	178
Anaesthetic	...	...	...	...	399
Unclassified	...	...	...	...	6
Mixed	...	...	...	...	2

*Helminthic Diseases.*—

Cestodes	...	771 cases	nil deaths
Trematodes	...	21 cases	1 death
Nematodes	...	1,432 cases	13 deaths
(Ascaris 706, Dracunculus 549, Ankylostomiasis 112 with 10 deaths, Filariasis 33, Oxyuris 9, others 23).			

The amount of disability or sickness caused by Ankylostomiasis appears from the records available to be very low though unquestionably it must act as an important contributory factor in lowering resistance against other diseases.



The infestation rate is certainly high throughout the Protectorate but undoubtedly a high degree of tolerance prevents the manifestations of symptoms except in rare cases where the infestation becomes excessive.

Reports as to incidence throughout the Protectorate have been somewhat contradictory, and before undertaking a mass campaign against this disease systematic examinations at all districts are being obtained, adopting similar technique in examinations, with a view to providing fuller and more accurate data as to its incidence and effects.

*Spirochaetosis ictero-haemorrhagica* or Infectious Jaundice.—

An outbreak of this disease occurred at Arua in the West Nile District where 81 cases with two deaths were treated and many other cases were reported in the locality but not treated.

The cases were mostly mild in character and the monthly prevalence was :— July two cases, August two cases, September three cases, October 22 cases, November 39 cases, December 13 cases.

Jaundice was always present, the conjunctivæ being light yellow to commence with and becoming deeply jaundiced later. The palms of the hands and soles of the feet were most noticeably yellow; thick yellow fur on tongue; urine deeply stained and might be mistaken for hæmoglobinuria. Spleen and liver were neither tender nor enlarged; pulse slow in rate. The onset was generally characterised by general pains in the abdomen and sometimes chest, fever which never ran very high  $101^{\circ}$  being the maximum, and Jaundice.

The disease ran a course of from three to six weeks, recovery being apparently very slow.

No skin eruptions were noted and spirochaetes were not found in the urine.

Treatment given was calomel in full doses.

### (C) European Officials.

821 cases of sickness with three deaths occurred among the European officials during the year as compared with 869 cases with three deaths in 1924. The causes of death were :—Injuries by elephant (1), Uraemia (1), Acute Nephritis (1).

The principal causes of sickness were :—Malaria, Influenza, Diseases of Digestive System, Local Injuries, Diseases of Respiratory System, Debility, Relapsing Fever, Measles, Blackwater Fever.

### MEDICAL BOARDS.

Medical Boards were held on 13 officials and the recommendations of the Boards are recorded below:—

(a)	To be invalided out of the service	...	...	...	3
	Nervous breakdown	...	...	1	
	General Furunculosis	...	...	1	
	Colitis	...	...	1	
(b)	To proceed on leave to England for treatment	...	...	...	1
	Chronic Diarrhoea	...	...	1	
(c)	To proceed on short leave to England	...	...	...	3
	Debility	...	...	1	
	Tuberculosis	...	...	1	
	Blackwater Fever	...	...	1	
(d)	To proceed on leave to South Africa	...	...	...	1
	Blackwater Fever	...	...	1	
(e)	To proceed on leave on completion of tour and be examined as to fitness before returning to Protectorate	...	...	...	1
	General condition	...	...	1	
(f)	To proceed on sick leave to Kenya	...	...	...	1
	Temporo-sphenoidal abscess	...	...	1	
(g)	To be posted to healthier stations	...	...	...	3
	Probable dormant trypanosomiasis	...	...	1	
	Malaria	...	...	1	
	Debility (Chronic malaria)	...	...	1	

## LOCAL SICK LEAVE.

In addition to the 13 officials who were medically boarded 37 others were granted local sick leave for varying periods either in Kenya or Uganda. Attention is invited to the fact that if it were not for the distance of Uganda from the United Kingdom and for the expense of travelling most of these 37 officials and those who were medically boarded would have been sent home on sick leave. The number of invalidings, which we record for statistical purposes, *i.e.* 9, is consequently misleading and cannot properly be compared with other invaliding rates, *e.g.* those for the West Coast.

22, out of 117 European officials who proceeded to England on ordinary leave in the course of the year, were recommended for examination by a Medical Adviser to the Colonial Office.

TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES OF EUROPEAN OFFICIALS DURING THE LAST THREE YEARS.

			1923		1924		1925
Total number of officials resident	..	...	383	...	434	...	488
Average number resident	...	...	313	...	361	...	366
Total number on sick list	...	...	766	...	713	...	821
Total number of days on sick list	...	...	2,962	...	2,415	...	3,148
Average daily number on sick list	...	...	8.1	...	6.59	...	8.62
Percentage of sick to average number resident	...	...	2.58	...	1.82	...	2.49
Average number of days on sick list for each patient			3.86	...	3.38	..	3.82
Average sick time to each resident	...	...	9.46	...	6.68	...	9.09
Total number invalided	...	...	8	...	12	...	9
Percentage of invalidings to total residents	...	...	2.08	...	2.76	...	1.84
Total deaths	...	...	2	..	3	...	3
Percentage of deaths to total residents	...	...	0.52	...	0.69	...	0.61
Percentage of deaths to average number resident	..	...	0.63	...	0.83	...	0.86
Number of cases of sickness contracted away from station			39	...	(No record)		

TABLE VIII.

TABLE SHOWING THE CAUSES OF INVALIDING AMONGST EUROPEAN OFFICIALS DURING THE PAST SIX YEARS.

DISEASES.	1925	1924	1923	1922	1921	1920	Total.
Blackwater Fever	2	—	2	2	—	1	7
General Debility	—	2	—	—	—	1	3
Nervous and Mental Diseases	—	1	—	1	—	—	2
Neurasthenia	—	1	—	4	—	5	10
Alcoholic Neuritis	—	—	—	—	1	—	1
Malaria	—	2	—	—	—	1	3
Rheumatism	—	—	—	—	—	1	1
Villous Papilloma of Bladder	—	—	—	—	—	1	1
Henock's Purpura	—	—	—	1	—	—	1
Alcoholism	—	—	—	1	—	—	1
Chronic Parenchymatous Nephritis	—	—	—	1	—	—	1
Nervous Breakdown	1	1	—	1	—	—	3
Malaria, Heart and Defective Eyesight	—	—	—	1	—	—	1
Cerebral Congestion	—	—	—	1	—	—	1
Asthma and General Debility	—	—	—	1	—	—	1
Chronic Malaria and Anæmia	—	—	—	1	—	—	1
Excitability and Dilated Heart	—	—	—	1	—	—	1
Hernia	—	—	—	1	—	—	1
Duodenal Ulcer	—	—	1	—	—	—	1
Injuries	—	—	1	—	—	—	1
Colitis	1	—	1	—	—	—	2
Debility	1	—	1	—	—	—	2
Gunshot Wound	—	—	1	—	—	—	1
Tuberculosis	1	—	1	1	—	1	4
Hemiplegia	—	1	—	—	—	—	1
Sarcoma of the Mediastinum	—	1	—	—	—	—	1
Hæmaturia	—	1	—	—	—	—	1
Arthritis	—	1	—	—	—	—	1
Gastritis	—	1	—	—	—	—	1
General Furunculosis	1	—	—	—	—	—	1
Chronic Diarrhœa	1	—	—	—	—	—	1
Post-war disability	1	—	—	—	—	—	1
TOTALS	9	12	8	18	1	11	59



## EUROPEAN NON-OFFICIALS.

The total number of European (non-official) cases treated at Government Hospitals was 763 with 15 deaths. Many other cases of sickness occurred but these are not recorded as treatment was received elsewhere.

The causes of deaths were:—

Blackwater Fever	...	4	Puerperal Septicæmia	...	...	1
Malaria	...	3	Central Hæmorrhage	...	...	1
Phthisis	...	1	Infantile Diarrhœa	...	...	1
Pneumonia	...	1	Debility and Heart Failure	...	...	1
Sleeping Sickness	...	1	Apoplexy	...	...	1

The principal causes of sickness were:—

Malaria	Dysentery
Influenza	Blackwater Fever
Diseases of Digestive System	Measles
Diseases of Respiratory System	Relapsing Fever.
Local Injuries	

**(D) Asiatic Officials.**

1,472 cases with nil deaths are recorded as against 1,763 cases with six deaths last year.

The most prevalent diseases were Malaria, Diseases of Digestive System, Diseases of Respiratory System, Influenza.

## MEDICAL BOARDS.

Six Medical Boards were held on Asiatic officials during the year, the following recommendations being made:—

(a) To be invalided out of the service	...	...	...	5
General ill-health and debility	...	...	1	
Debility	...	...	1	
Neurasthenia	...	...	2	
Chronic Rheumatism	...	...	1	
(b) To be allowed to retire	...	...	...	1
Age limit and defective eye sight	...	...	1	
				<hr/> 6

## LOCAL SICK LEAVE.

Seven Asiatic Officials were granted sick leave for varying periods to be spent in Uganda or Kenya.

TABLE SHOWING THE SICK, INVALIDING AND DEATH RATES OF ASIATIC OFFICIALS DURING THE LAST THREE YEARS.

	1923	1924	1925
Total number of officials resident	300	415	550
Average number resident	339	387	518
Total number on sick list	1,447	1,763	1,472
Total number of days on sick list	5,299	3,408	4,368
Average daily number on sick list	14.47	9.31	11.96
Percentage of sick to average number resident	4.26	2.40	2.31
Average number of days on sick list for each patient	3.66	1.93	2.96
Average sick time to each resident	15.63	8.80	8.43
Total number invalided	6	8	6
Percentage of invalidings to total residents	2.00	1.92	1.09
Total deaths	2	6	—
Percentage of deaths to total residents	0.66	1.44	—
Percentage to average number resident	0.59	1.55	—
No. of cases of sickness contracted away from station	No record	No record	

**Housing**

In a tropical mosquito infested country like Uganda where the dominating cause of illness and disability among Europeans and Asiatics is Malaria and its concomitants, too much stress cannot be laid upon the necessity for providing adequate housing accommodation of a permanent, commodious and mosquito-proof design for all officials.



The influx of officials to Uganda within recent years has outstripped the building of additional houses and quarters required for their accommodation, with the result that acute housing shortage exists at all the important centres of the Protectorate, necessitating an undesirable amount of doubling up and residence in hotels. In many of the outstations conditions are still worse through the retention and use of old temporary houses which have long ceased to be suitable for habitation in a tropical country. The defective housing accommodation existing in stations of the more unhealthy districts of Eastern Province such as Lira, Tororo, Mbale, and in the West Nile and other districts of the Northern Province is undoubtedly responsible for much of the illness occurring in these unhealthy areas.

An extensive programme is at present being undertaken by the Public Works Department in building new houses and putting defective houses in repair. It cannot be urged too strongly that intensive and rapid construction appears on medical grounds to be a paramount necessity to make up leeway and to keep pace with the increasing influx of official population.

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## SECTION IV.

### **Meteorology.**

All available information under this head is embodied in the Blue Book.

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## SECTION V.

### **Hospitals and Dispensaries.**

#### ACCOMMODATION.

##### BUGANDA KINGDOM.

*Entebbe.*—Permanent beds—European six and one cot, Asiatic three, Native 28, Isolation Hospital 14. Two new latrines were built at the European Hospital and two at the Native Hospital.

*Kampala.*—Permanent beds—European 15, Asiatic 14. Several minor repairs to existing buildings were done.

*Mulago.*—(See Mulago Report by the Senior Medical Officer, Mulago—Appendix IV.)

*Masaka.*—Permanent beds—Native 12, Temporary 24, Isolation 8. A temporary dressing-room and a food store were built and various improvements and repairs were carried out.

*Mubende.*—Permanent beds—Native 12, Temporary beds—Native 12. Minor repairs and improvements were carried out.

*Bombo.*—Permanent beds—Native 30; Temporary beds—Native 24. No new buildings were erected.

##### NORTHERN PROVINCE.

*Hoima.*—Permanent beds—Native 44. A 44-bedded modern ward was completed and opened.

*Masindi.*—Temporary beds—Native 38; also a temporary Isolation camp for 30 beds.

*Butiaba*.—Temporary beds—Native 30; also a temporary isolation camp for 30 beds.

*Arua*.—Temporary beds—Native 30.

*Kitgum*.—Temporary beds—Native 48. Three new huts were built.

*Gulu*.—Temporary beds—Native 26. Minor repairs were done to existing buildings.

*Moyo*.—Temporary beds—Native 20. Huts to accommodate these were built this year.

#### EASTERN PROVINCE.

*Jinja*.—Permanent beds—European 4, Asiatic 4, Native 60, and Isolation 16. Temporary beds—Native 20. A modern 42-bedded ward was completed and opened in 1925 and attendants' quarters of six rooms with kitchen latrines, bathroom and tank were built. Various improvements to existing buildings were carried out. A second small Asiatic Hospital has been gifted to Government and is under construction.

*Mbale*.—Permanent beds—European 3, Native 42. Temporary beds—Native 52, Isolation Hospital 20. A modern 42-bedded ward for natives was completed and opened. The following temporary buildings were also completed:—Three wards, one kitchen, one laundry, one food store, one post mortem room, one house for disinfectors, attendants' quarters with necessary outhouses, a convalescent camp of nine huts with cook house and latrines, a garage, an isolation camp of three houses with cook house and latrines.

A small Asiatic Hospital has been gifted to Government and is under construction.

*Tororo*.—Temporary beds—Native 16. One permanent dispensary was built and one temporary ward of 16 beds. Temporary quarters for three native attendants, one store and one kitchen were also built.

*Lira*.—Permanent beds—Native 30; Temporary beds—Native 22. A new temporary 22-bedded ward was built and completed.

*Namasagali*.—Permanent beds—Asiatic 2, Native 6.

*Soroti*.—Permanent beds—Asiatic 12, Native 20. Temporary beds—Native 50, Isolation Hospital 20.

The following new buildings were completed and opened:—An Administrative block with pack store, kitchen and food store.

An Asiatic Hospital of two wards was completed and gifted to the Government.

Various improvements to existing buildings were carried out.

#### WESTERN PROVINCE.

*Mbarara*.—Permanent beds—Native 24; Temporary beds—Native 22. A new kitchen, laundry, latrines and tanks were built and various improvements and repairs to existing buildings were carried out.

*Kabale*.—Temporary beds—Native 22; Temporary beds—Isolation 22.

*Fort Portal*.—No hospital beds are provided at the Government Dispensary at Fort Portal which is merely a temporary dispensary for outpatients. Serious cases of illness have been admitted to the C.M.S. Hospital, at Kabarole, under a fixed scale of charges, and we are much indebted to Dr. Schofield, of the C.M.S., for the valuable assistance which he has rendered in these services, and also for his special treatment and reports on Sleeping Sickness cases in connection with grants of Tryparsanide from the Rockefeller Institute.

The need for a small native medical unit at Fort Portal becomes increasingly urgent, more particularly in connection with the surrounding sub-dispensaries, and control of the Sleeping Sickness areas at Bwamba and Katwe.

#### SUB-DISPENSARIES.

In 1924 at the end of the year 46 sub-dispensaries had been completed and were in working order. During 1925 two of these, which were temporary, were closed down and 10 more were completed, thus 54 sub-dispensaries were in running order and staffed by the end of the year.



The distribution of these is as follows:—

Buganda Kingdom	...	16	Northern Province	...	7
Eastern Province	...	13	Western Province	...	8

The use of sub-dispensaries continues to prove eminently satisfactory as being the most effective means of bringing medical aid within the reach of native populations too remote from district hospitals to take advantage of them. Their extended use is strongly recommended.

They are built on a basis of half and half expenditure by Government and the Native Lukikos. Stores and up-keep are found by Government and they are run by native medical staff under the weekly supervision of the District Medical Officer. Menial staff is supplied by the Lukikos.

Difficulty is being experienced in providing a sufficient number of reliable well trained native attendants; the responsibilities of the native assistant in charge are considerable. It is hoped to remedy this in the future by the systematic medical training of natives which is now being instituted at Mulago.

### Native Lunatic Asylum.

The old prison building at Hoima still serves for this purpose. The further additions and alterations which were stated in my last year's Annual Report to be necessary in 1925 have been completed.

More accommodation for both sexes and also two exercise compounds with open iron fencing were provided for male and female inmates. These extensions have been very beneficial to the health and well-being of the inmates but it must be fully realised that this building is by no means ideal and that it is only a temporary makeshift pending the building of a modern mental hospital.

*Admissions, Deaths, etc., during the year.—*

Total inmates remaining on 31st December, 1924	...	...	...	Criminal	11	Simple.	29
Number admitted during the year	...	...	...		4		26
Number released	...	...	...		—		3
Number transferred to other Institutions	...	...	...		—		—
Number died	...	...	...		1		11
Number remaining on 31st December, 1925	...	...	...		41		14

Of the 55 inmates who remained at the end of the year 43 were males and 12 were females.

*Causes of Death.—*

Acute Mania	...	...	...	1	Dysentery Amoebic	...	1
Exhaustion following Acute Mania	...	...	...	2	Heart failure	...	3
Exhaustion following Mental Condition	...	...	...	2	Broncho pneumonia	...	1
Septicaemia seq. Cystitis	...	...	...	1	Bronchitis and Exhaustion	...	1

No epidemics occurred.

### European and Asiatic Hospitals, Kampala.

The European Hospital, Kampala, and the Mulago Native Hospital in their present stages of advancement are now fine creditable institutions. The buildings are admirable, and the excellence and usefulness of the work carried out by their respective staffs have gained them widespread popularity.

The accommodation of the European Hospital has latterly been overtaxed and an extension will soon have to be contemplated. This will best be accomplished by building a new Sisters' bungalow, converting the present Sisters' bungalow, which possesses insufficient quarters, into a maternity block and utilising the present maternity wing for general/hospital beds. Both the maternity wing and the hospital suffer at present through the inclusion of the former in the general building.

The X Ray plant has not yet been installed and we are indebted to the C.M.S. Hospital, Namirembe, for placing their apparatus at our frequent disposal for X Ray examinations. An up to date plant is becoming a pressing requirement for all our hospitals, and it is now considered that this plant can most advantageously be incorporated with the new Asiatic Hospital which is projected for next year so that it can conveniently be used by European, Asiatic and Native hospitals.

Dr. A. R. Cook, M.D., C.M.G., O.B.E., accepted an honorary appointment as Consulting Physician to the Government European Hospital towards the end of the year, and his wide experience and authority are certain to be of the greatest benefit both to patients and staff of the hospital. An extension of the principle of consultants and specialists in various branches from among our own staff with the formation of a Central Clinic has been suggested by Mr. C. H. Marshall, F.R.C.S., Specialist Surgeon, and is receiving consideration.

The Asiatic Hospital containing 14 beds has done excellent service during the year but the accommodation provided is altogether inadequate and the buildings which were converted from part of the old native hospital are far from satisfactory. Extensions are urgently needed to make adequate medical provision for the growing Asiatic population and the increasing numbers of Government artizans and officials.

Recommendations for the building of an Asiatic Hospital at a new central site have been submitted and have received the Governor's warm approval. It is hoped that provision will be included in Estimates for undertaking a section of this hospital in 1926. A creditable thoroughly up to date hospital of from 60—100 beds is contemplated. It is proposed that a clinical laboratory as a section of the Entebbe Laboratory should constitute a separate block at this Central Asiatic Hospital, and that a modern X Ray plant should be installed here instead of at the European Hospital.

### Health in Prisons.

The following statistics are for all the Government Prisons in the Protectorate:—

Total number committed to prisons	...	...	...	5,936
Daily average number of prisoners	...	...	...	5,430
Daily average on the sick list	...	...	...	430 or 7·9%
Number of admissions to hospital	...	...	...	906
Total number of deaths	...	...	...	48
Death rate	...	...	...	8·8 per 1,000

*General Health.*—The usual epidemics of Dysentery, Influenza, Chickenpox and Mumps were experienced but to a lesser degree than usual and on the whole the health of the prisoners in general might be classed as distinctly good.

The most prevalent diseases were Malaria, Bronchitis and minor ailments.

*Dietary.*—A maize meal ration was successfully introduced during the year. The authorised scales of diet are as follows:—

#### (a) NATIVE

	Class A.	Class B.	Class C.
Maize flour, finely ground and sifted, or rice unpolished	1½ lbs.	1½ lbs.	1½ lbs.
Beans	4 ozs.	4 ozs.	4 ozs.
Groundnuts or sim sim	2 ozs.	2 ozs.	2 ozs.
Salt	½ oz.	½ oz.	½ oz.
Fresh vegetables or 2lbs of germinated beans or 2 lemons weekly	2 lbs.	2 lbs.	2 lbs.

#### (b) SWAHILIS.

Sweet potatoes	2 lbs.	2 lbs.	3 lbs.
Salt	⅞ oz.	⅞ oz.	⅞ oz.
Rice	12 ozs.	1 lb.	1 lb.
Condiments	¼ oz.	¼ oz.	¼ oz.
Dhall	3 ozs.	3 ozs.	3 ozs.

#### (c) ASIATICS AND ARABS.

Flour	8 ozs.	10 ozs.	10 ozs.
Rice	4 "	4 "	8 "
Dhall	2 "	2 "	4 "
Ghee	2 "	2 "	2 "
Onions	1 oz.	1 oz.	1 oz.
Salt	⅔ oz.	⅔ oz.	⅔ oz.
Condiments	¼ oz.	¼ oz.	¼ oz.
Meat...	6 ozs.	6 ozs.	6 ozs.
Vegetables	2 "	2 "	2 "

#### (d) EUROPEANS

	Class A.	Class B.	Class C.
Tea	¼ oz.	¼ oz.	¼ oz.
Bread	1 lb.	1 lb.	1 lb.
Sugar	3 ozs.	3 ozs.	3 ozs.
Butter	2 oz.	2 oz.	2 oz.
Meat	8 oz.	12 oz.	12 oz.
Vegetables	8 oz.	8 oz.	8 oz.
Salt	⅝ oz.	⅝ oz.	⅝ oz.
Fresh milk	½ pt.	¾ pt.	¾ pt.
Potatoes	8 ozs.	8 ozs.	8 ozs.
Porridge	4 oz.	4 oz.	4 oz.

#### (e) EURASIANS.

Bread	12 ozs.	1 lb.	1 lb.
Tea	¼ oz.	¼ oz.	¼ oz.
Sugar	1 oz.	1 oz.	1 oz.
Fresh milk	¼ pt.	¼ pt.	¼ pt.
Rice	8 ozs.	10 ozs.	10 ozs.
Beans or peas	4 oz.	4 oz.	4 oz.
Ghee	1 oz.	1 oz.	1 oz.
Onions	½ oz.	½ oz.	½ oz.
Salt	½ oz.	½ oz.	½ oz.
Potatoes	4 ozs.	4 ozs.	4 ozs.
Meat	4 oz.	6 oz.	6 oz.

NOTE:—Class A. Those sentenced to simple imprisonment.

Class B. Those sentenced to rigorous imprisonment under which all prisoners must be placed unless otherwise instructed.

Class C. Special cases.



## Maternity Training Schools and Maternity Childwelfare Centres.

The Lady Coryndon Maternity Training School and the Nsambya Mission Training School have both made great advances during the year, and their excellent results and popularity both at the training schools and at their established maternity centres throughout the country have gone far to enhance their fame and to establish the success of this pioneer maternity scheme.

Our great indebtedness is again due to Dr. and Mrs. Albert Cook, of the L.C.M.T. School, and to the Rev. Mother Kevin and Dr. Connolly, of the Nsambya Maternity Training School, for the splendid services they have rendered in carrying out to a successful issue the detailed and arduous work in training and supervision in connection with the scheme.

Excellent reports from both schools on the year's work and results are appended in full. The report from Dr. Cook is comprehensive and eloquent as to the history of the inception of this scheme, its establishment and progress, the difficulties that have been surmounted and the admirable results that have been achieved.

A useful Maternity and Childwelfare Clinic engaged chiefly in ante-natal treatment is conducted weekly at Mulago. Dr. Webb's report is included in the Mulago Special Report, Appendix No. IV.

At Hoima Government Hospital an ante-natal clinic was opened during the year with very promising results.

The Midwives Ordinance of 1922 was found to be unsuitable in many respects and in the light of experience gained many amendments have been incorporated in an Amended Ordinance which it is hoped will be passed early in 1926.

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### REPORT OF THE LADY CORYNDON MATERNITY TRAINING SCHOOL, NAMIREMBE, 1925.

*General Superintendent and Inspector of County Centres*—Mrs. A. R. Cook, M.B.E.

*Superintendent of Training School*—Miss Cochrane. *Nursing Sister*—Miss Camplin.

*Obstetric Physician*—Dr. A. R. Cook, C.M.G., O.B.E., M.D. (Lond.)

If it be true that every seven years ushers in a fresh period of growth in the life of the human being during its development then the present moment is a suitable one both for surveying the past and envisaging the future of the Maternity Training School. Just seven years ago, in January, 1919, the first tentative efforts were made in the starting of a Maternity Training School in certain rooms adapted for the purpose in Namirembe Hospital; 2½ years later the beautiful and spacious building which adorns the lower slopes of the Mission Hill was opened by Lady Coryndon and the growing school was housed in suitable buildings, which have ever since been a hive of activity and usefulness.

Let us at the outset acknowledge with gratitude the unfailing help and courtesy we have received from the British Government of this Protectorate. If it was the vision and inspiration of the Foundress, still happily spared to carry on the work, which determined its origin and inception, it is the backing given by a sympathetic and helpful Government which has enabled it to extend so widely and so well. Their Excellencies, Sir Robert and Lady Coryndon, Sir Geoffrey and Lady Archer, and Sir William Gowers have all taken pains to make us feel that they whole-heartedly approve of our efforts and from Dr. Reford, the present D.M.S.S., down through the whole of the Government Medical Staff, we have experienced nothing but courtesy and help. Was legislation needed to establish the C.M.B. certificate? They carried it through, meeting as far as possible our wishes and bearing with patience our constructive and destructive criticism. It is an open secret that within a few days, an Amended Midwives' Ordinance, modified by the experience gained from seven years' teaching and inspections, will be published.

They have given financial aid in the shape of grants-in-aid, which have enabled us to extend and consolidate the work and indirectly used their influence through Provincial Commissioners and District Commissioners to stimulate the Native Government in their much neglected duty of building Maternity Centres.

It may be worth while in our review, just to recall again the *raison d'être* of the work.



The losses sustained in the Great War once more drew attention to the great importance of the man power of a country. The timid speculations of the Neo-Malthusians cut no ice in the counsels of a paternal Government which recognises to the full the need of a strong healthy population to fill the vast vacant spaces of Central Africa and to carry on the economic life of a Protectorate like Uganda with its almost unlimited potentialities. In the seven years from 1914-1920 inclusive, the vital statistics of the Kingdom of Buganda, as published in successive Government Blue Books, showed a total of 67,999 births, 93,035 deaths and 7,111 still-births. These facts startled men into a realization of the truth that the Baganda though a prolific and virile race were in danger of becoming extinct through disease and ignorance. The Government took energetic action. A threefold attack was launched. An intensive anti-venereal campaign was started with Mulago as its headquarters and with dependent centres throughout the Protectorate. Some years later this scheme was enlarged to embrace medical work generally.

The Maternity Training School with its country centres and infant welfare work was actively encouraged and more attention was paid to education and general hygienic propaganda.

These measures bore immediate fruit and at the present time it is probably true to say that the population of the Protectorate is increasing. In years to come there is every hope that the increase will be rapid.

The work carried on in connection with the School is two-fold. There is the Central Factory where the Midwives are prepared and fitted for their work, and the centres to which they go after qualification.

The difficulties were formidable for there was but little previous experience to guide us. First the necessary buildings had to be provided. A sum of at least £5,000 was needed for the Central School on Namirembe. Here we had an agreeable surprise. The soundness of the scheme caught on, every class in the community gave generously except, curiously enough, the natives who were chiefly to benefit by the result. Missionaries, settlers and planters, and the general public helped. Lady Coryndon held a Garden Fair and when £4,000 had been raised, the Government gave the last thousand required. The detailed plans were worked out in the Public Works Department Office and much help was given by various friends. The foreman of the work was, *mirabile dictu*, the Superintendent herself—the first time surely in the history of Uganda that a lady supervised such a building. In June, 1921, the completed building, with its dormitories, its clinical and labour wards, its spacious dispensary, and its living rooms for the sisters in charge, was opened by Sir Robert and Lady Coryndon.

Meanwhile, in temporary quarters, the first batches of midwives had been trained, and sent forth to various Maternity and Child Welfare Centres throughout the Protectorate. Much was learnt, sometimes by way of failure, as to how to train the semi-educated girls that came, into useful and reliable women. The idea was new to the native mind; the position designed was a very responsible one.

The girls had to be taken fairly young so as to get adaptable and teachable minds. The educational authorities of the Mission were strangely shy in recommending this vocation, so suitable for women, to their best educated girls.

The moral dangers for these attractive young women were very grave. The accepted idea hitherto had been to keep the young people apart, so far as the sexes were concerned, in their education.

The best scholars did not always possess the most stable moral characters. Many of them came from homes of doubtful virtue. The anxious question was not so much “would some fall” as “would any stand.”

Various expedients and plans were talked over and discussed. The advantages of placing the midwives in pairs, of opening centres at Mission Stations, of getting elder women to live with the girls, of placing them under the charge of a native clergyman and his wife, of constant and vigilant inspection and surprise visits, of encouraging marriage, and of placing the centre close to the Gombolola Chief, were tested and compared. A special uniform was designed, which gave dignity to their position, protection to their office, and insured help in difficulties.

The endeavour was made to get only girls to train of proved moral character, and the most earnest efforts made by the Superintendent to keep in loving and sympathetic touch with them at their centres, while no hesitation was felt in even frequent changes of location did circumstances seem to demand it.



What has been the result of the first seven years work? Let us be quite frank in stating the disasters as well as the triumphs. Out of 42 midwives, who passed the Government qualifying examination, and received the C.M.B. Certificate, up to the end of 1925, 10 have had to be suspended for immorality, two have been dismissed for unsatisfactory conduct (laziness and inattention to their work) and seven have married of whom only two are still working.

On telling these facts to a distinguished expert in Mission Education, Mr. J. H. Oldham, his characteristic remark was that he would not have thought that the proportion of success would have been so high.

Having frankly dealt with these failures, which are almost inherent in pioneer work of this description, it is only fair to refer to the eulogistic and most hearty approval of such bodies as the Phelps Stokes Commission, the East African Commission and others.

Dr. Jesse Jones, after a careful examination of the methods of teaching and the results, stated that in his opinion they were a century ahead of any other female education in the country.

With regard to the country centres, some have been given up, chiefly on the outskirts of the Protectorate, owing either to the difficulties of supervision or to the reluctance of the women to come. At Kabale in Kigezi, not a single Mukiga woman came for the year and a quarter the midwife was stationed there, though she found useful occupation and was much appreciated in the women's wards in the hospital.

Butiti in Toró proved too isolated; at Kamuli in Busoga the apathy of the local population made the work unsatisfactory; at Bamusuta in Singo hardly anyone came. On the other hand, as the statistics appended show, the work of the centres was greatly appreciated in many places and the women eagerly availed themselves of the opportunity of getting help for themselves and their children.

With a few striking exceptions, such as Luwero, Jungo, Nakifuma, Kasaka, Namulongo and Ndeje, it has been all collar work in getting the local chiefs to do what is so obviously for the good of their country, while the difficulty of getting Luwalo labour has made the building of even temporary zaliros, at times, well nigh impossible. Still progress has been made. The opening of the large Practising School at Nakifuma, by Lady Irene, the wife of the Kabaka, was a real mile-stone in the educational uplift of the women of the country. Here the newly qualified midwives are sent for post-graduate practice before being drafted off to independent centres. The nursing sister in charge, Agira Uja, is herself a remarkable product of the Training School. Few, if any, of the Baganda women in the Protectorate, surpass her in dignity of manner, clearness of judgment, or professional skill.

The centres of Jungo and Namulongo were opened during the year in Uganda and Kahangi in Toro, while the stations of Luwero, and Ngogwe opened the year before have more than won their way.

We have had many distinguished visitors, and their kindly appreciation of the work has lightened the labours of administration. H.E. Sir William Gowers has been a frequent visitor and his hearty approbation has stimulated us all. Lady Minto's visit was of exceptional interest as her own splendid work in India in nursing homes is so well known. Quite recently Sir Edward and Lady Grigg spent long hours in inspecting the Central Institution and went to three of the country stations. Mr. J. H. Oldham and Dr. Loram were much appreciated visitors and Dr. Gilks, the P.M.O. of Kenya Colony, paid us a visit and inspected the work.

Quite an interesting feature of the work has been the way it has stimulated neighbouring Governments: Uganda has the honour of being the first African dependency to initiate legislation and enact a Midwives' Ordinance.

No one who met Lady Grigg on her recent visit can forget the flame of enthusiasm with which she studied the work with the avowed intention of starting similar work in Kenya. At her earnest request two midwives are being sent to Mombasa to help her.

Tanganyika Territory is sending students for training. A Commissionaire Belge visited the School with a view of introducing some such scheme in the Congo Belge.



Dr. Loram, one of the three permanent Native Commissioners in the Government of the Union of S. Africa is hopeful of initiating a similar training school in the native reserves there. All these projects suggest the essential unity and solidarity of this question of maternity and child welfare centres among the native races of the African continent.

In conclusion, the statistics for the year 1925 show a healthy and substantial increase on those of the preceding year.

Owing to the expansion of the work, it became physically impossible for one lady to supervise the whole of the work, so in response to our earnest request the Church Missionary Society sent out another fully qualified Nursing Sister with special midwifery experience, Miss Cochrane, who arrived at the commencement of the new year. Mrs. A. R. Cook retains the general superintendence of the midwives and the inspection of the country centres, while Miss Cochrane becomes superintendent of the Training School.

21 students were in training during the year of whom 12 passed the qualifying examination.

The numbers were as follows:—

	<i>Confinements attended.</i>		<i>Living babies discharged.</i>	
	1925	1924	1925	1924
Central Institution ...	664	596	610	463
Country Centres ...	1,059	734	1,005	665
	<u>1,723</u>	<u>1,330</u>	<u>1,615</u>	<u>1,128</u>

Total number of Out-Patient attendances:—

	1925	1924
Central Institutions ...	26,088	23,628
Country Centres ...	78,933	44,801
	<u>105,021</u>	<u>68,429</u>

In the Central Institution, which it must be remembered is organised as a training school and not as hospital (*i.e.* the wards are administered as clinical wards for teaching purposes) in 1925, 896 women were admitted for ante-natal treatment or for confinement, and 610 new born infants were cared for. This gave a wealth of clinical material for instructing the students, especially as many of the inpatients were abnormal cases. Out of 10 consecutive Caesarean sections, only one woman died—2½ months after the operation, and all the babies survived.

There were 12 maternal deaths in 664 confinements but nine of these arrived moribund from the administration of native “medicine” at their own homes—two of them with ruptured uteri; one was due to concealed accidental hæmorrhage, one to severe anæmia (Ankylostomiasis), and one from severe hæmorrhage consequent on retained placenta. She had been brought in from the country.

The infants’ deaths were due to three main causes:—

1. Syphilis, with insufficient ante-natal treatment;
2. Premature births from the same cause; and
3. Cases of infected cords in children admitted from outside, who had been born in their own homes.

There was one hysterectomy for ruptured uterus—the woman recovered. A similar case, where the rent was only sutured, died.

There were five cases of perforation and cephalo-tripsy, and 59 cases where forceps were applied, usually for contracted pelvis, complicated by native medicine.

As regards the country centres—15 of these were worked during the year under review. Out of 1,059 confinements attended, 1,005 living children were discharged with only five maternal deaths and 54 still-births. When we remember that no less than two-thirds of Baganda women have suffered from syphilis, these figures are eloquent with the saving of maternal and infant life. Only seven years ago it was calculated that out of 1,000 pregnancies there would have been something like 420 miscarriages and still-births. The immense saving of infant life in the growing numbers attending at the out-station centres is thus apparent.



In the centres, 63,154 attendances of ante-natal cases were registered, 7,731 infant welfare, and 8,048 venereal cases.

Centre.	Confine-ments.	Ante-natal attend-ances.	Child Welfare attend-ances.	Venereal cases.	Total Out-patients	Still-Births.	Living Children discharged.	Maternal Deaths.
Bamusuta (one month only) ...	0	58	13	24	95	0	0	0
Iganga ...	36	1,971	240	180	2,591	2	34	0
Jungo (three months only) ..	20	984	159	73	1,216	1	19	0
Kako ...	152	3,284	306	207	3,799	4	148	0
Kamuli (two months only) ...	3	21	5	0	26	0	3	0
Kasaka ...	36	4,788	677	221	5,686	2	34	0
Kikoma ...	29	5,173	345	148	5,666	4	25	0
Mbarara ...	43	3,723	0	2,075	5,798	5	39	1
Mityana ...	36	1,803	220	281	2,304	2	34	1
Mukono ...	133	5,010	1,043	916	6,969	6	127	0
Nabumale ...	10	1,234	571	595	3,050	4	6	0
Nakifuma ...	233	13,363	1,416	1,107	15,886	12	221	0
Ndeje ...	205	9,794	374	1,395	12,063	8	199	3
Luwero ...	61	7,660	1,075	224	8,959	3	58	0
Ngogwe ...	62	4,288	787	602	5,677	4	58	0
TOTALS ...	1,059	63,154	7,731	8,048	78,933	54	1,005	5

Thus the first seven years of unwearying seed-sowing, watering and cultivating are now beginning to issue in a bountiful harvest, but there is still more to follow and we shall need many more years of uncompromising, aggressive and triumphant warfare against the forces of ignorance, superstition and dirt which tend to limit and disintegrate the coming generations. The Uganda Protectorate administered by wise and far-seeing minds with a sure grasp on guiding principles has the privilege of being the pioneer in this work but it is not too much to say that as we look out on the great communities of natives in neighbouring Colonies and Protectorates we see the same needs struggling for expression in them and feel, rather than see, the first tremors of the coming tide of progress and advance.

**A. R. COOK,**

*Secretary, M. T. S. Committee.*

## REPORT OF NSAMBYA MATERNITY TRAINING SCHOOL, 1925.

### STATISTICS.

#### *Central Institution, Nsambya.*

Number of students	...	...	...	...	21
Number who passed Government qualifying examination	...	...	...	...	3
Total number of in-patients	...	...	...	...	281
Deliveries	...	...	...	...	138
Living children discharged	...	...	...	...	129
Still-births	...	...	...	...	9
Miscarriages admitted	...	...	...	...	31
Maternal deaths	...	...	...	...	1
Forceps operations	..	...	...	...	7
Caesarian section	...	...	...	...	1
Out-patients, including	Ante-natal attendance at V. D. clinic	...	...	...	370
Post-natal		...	...	...	356
General		...	...	...	—

#### *Country Centres.*

			Number of cases.	Still-births.	Maternity mortality.
Rubaga	...	...	15	1	0
Nagalama	...	...	69	6	3
Villa Maria	...	...	115	1	0
Kisubi	...	...	18	3	1
Kamuli	...	...	11	0	0
Butiti	...	...	6	0	0

(Last three Centres only open six months.)

## THE SCHOOL.

During the year under review 21 girls have been in training, three of whom entered for the Government examination in May and satisfied the examiners. Owing to the absence of Dr. Connolly there were no entrants for the November examination.

The ten practising midwives continue to give every satisfaction and can show a splendid record, and it is a source of great consolation to all concerned that our efforts to train these native girls to take a personal and kindly, as well as professional, interest in their cases, are proving so successful. They are showing a genuine interest in each case under their care, and in consequence of this we anticipate greatly increased numbers of in-patients, the native women still needing much encouragement to come into hospital for confinement.

## THE HOSPITALS.

*Nsambya*.—The number of in-patients shows a decrease on last year, owing to our having had plague at this hospital and the women naturally being afraid to come in. The figures show that the women have benefitted by the ante-natal treatment, and it is becoming less difficult to induce them to come for this treatment. There is still the old difficulty of their not coming in good time especially those from up-country, and consequent births on the road. We are giving special attention to this matter and propose building a house to accommodate these women, so that they will have no excuse for not coming in good time.

*Rubaga*.—This centre shows only a small number of cases for the year, being as it is in close proximity to Namirembe and Mulago. The Sisters there have nothing but praise for the midwife.

*Nagalama*.—This centre is going ahead and shows excellent prospects. A lady doctor has just been installed there, so this hospital, in conjunction with the V.D. camp which the Sisters have just taken over, ought to do very well.

*Villa Maria*.—This centre shows a fine record of 115 cases, with only one still-birth and no maternal deaths. The White Sisters here also are delighted with their native midwife.

*Kisubi*.—This has been open only six months. They are building a fine maternity hospital, 12 beds, and four private rooms. The women are beginning to come very well, the nurse has done exceptionally well and altogether the prospects are excellent.

*Kamuli*.—The chief difficulty here is getting the women to come in. They are of course very far behind and much prefer to stay in their own homes, but the Sisters are doing their best to work it up and will overcome this difficulty in time. It ought to become a good station.

*Butiti*.—We took over this centre only in September, and as the nurse we sent was objected to on account of being uncertificated, she has now been replaced by a certificated midwife. It will require a great deal of working up, as the women are afraid to come in, but we hope that the new nurse will be able to make friends with them. She is experienced, having been at Villa Maria for one year. Dr. Connolly on her visit of inspection arranged with the White Fathers, who are supervising this centre to send all the women to the native nurse, which will be a much more satisfactory arrangement. The people here are very poor. Shs. 30 only was taken in three months. It is therefore not yet self-supporting and we have to draw on the Deficiency Fund for this Centre.

## CHILD WELFARE.

The women have been very faithful in bringing their children born in our hospital regularly for examination and treatment if necessary. There is undoubtedly a most remarkable improvement in the physique and general condition of these children, especially in the matter of syphilitic symptoms, the very noticeable decline of which being most satisfactory and encouraging.

In conclusion I would add that it is my opinion that the work that is being accomplished under this new regime well justifies the extra expenditure which it involves on the Government and there is every reason to congratulate all concerned on the success which has so far attended our united efforts.

**MOTHER M. KEVIN,**  
*Superintendent.*



**Buildings.**

## STATEMENT OF WORK CARRIED OUT DURING 1925.

<i>Entebbe.</i> —							£
To alter patients' latrines at European Hospital to standard type	...	...	...	...	...	...	8
To complete female patients' latrines at Civil Hospital	...	...	...	...	...	...	7
Medical Store, completion of, including tanks and access road	...	...	...	...	...	...	280
Attendants' quarters	...	...	...	...	...	...	5
<i>Kampala.</i> —							
Completion of improvements to kitchen and latrines at Asiatic Hospital, Kampala	...	...	...	...	...	...	4
Improvements to operating room at European Hospital	...	...	...	...	...	...	590
European Hospital, completion of	...	...	...	...	...	...	41
Lay-out of European Hospital grounds	...	...	...	...	...	...	220
<i>Mulago.</i> —							
Animal house	...	...	...	...	...	...	145
Hospital ward for convicts	...	...	...	...	...	...	1,472
Attendants' quarters, male	...	...	...	...	...	...	913
Drainage	...	...	...	...	...	...	263
Tanks	...	...	...	...	...	...	598
Garage	...	...	...	...	...	...	403
Attendants' quarters, female	...	...	...	...	...	...	928
Quarters for labour	...	...	...	...	...	...	1,302
Nurses' quarters	...	...	...	...	...	...	63
Incinerator	...	...	...	...	...	...	75
<i>Jinja.</i> —							
Attendants' quarters, Native Hospital	...	...	...	...	...	...	393
Additions to Native Hospital	...	...	...	...	...	...	305
Improvements, European Hospital	...	...	...	...	...	...	27
Reconditioning old native ward latrines	...	...	...	...	...	...	7
<i>Mbale.</i> —							
Temporary ward and outbuildings	...	...	...	...	...	...	447
Hospital buildings, one ward	...	...	...	...	...	...	463
<i>Soroti.</i> —							
Native Hospital, completion of	...	...	...	...	...	...	1,410
Alteration to existing ward	...	...	...	...	...	...	94
<i>Masindi.</i> —							
Native Hospital ward	...	...	...	...	...	...	1,534
<i>Hoima.</i> —							
Attendants' quarters, Native Hospital	...	...	...	...	...	...	369
Native Hospital, completion of	...	...	...	...	...	...	192
Lunatic Asylum, special repairs	...	...	...	...	...	...	570
<i>Mbarara.</i> —							
Native Hospital, Improvements	...	...	...	...	...	...	300
Native Hospital, Temporary ward	...	...	...	...	...	...	366
TOTAL						...	£13,794
<i>Kampala.</i> —							
Lady Coryndon Maternity Training School, repairs	...	...	...	...	...	...	£63
Sub-Dispensaries (20)						...	£2,783
GRAND TOTAL						...	£16,640

## MINOR WORKS AND REPAIRS.

The sum of £400 was expended on minor works and repairs at the following stations:—Entebbe, Kampala, Mulago, Jinja, Mbale, Soroti, Mbarara, Fort Portal, Masindi and Hoima.

TABLE VI.

TABLE SHOWING BY STATIONS, THE NUMBER OF CASES WITH DEATHS, TREATED AS IN-PATIENTS AT GOVERNMENT HOSPITALS DURING THE YEAR.

Station.	1925.					1924.				
	Remain- ing 1924.	Yearly Admissions.	Total Deaths.	Total Cases Treated.	Remain- ing 1925.	Remain- ing 1923.	Yearly Admissions.	Total Deaths.	Total Cases Treated.	Remain- ing 1924.
Arua ...	62	868	12	920	51	92	1,303	29	1,395	62
Bombo ...	23	503	17	526	42	40	391	6	431	23
Butiaba ...	5	260	14	265	16	1	133	—	134	5
Entebbe ..	19	666	35	685	16	21	466	23	487	19
Fort Portal ...	12	123	1	135	15	—*	133	—	133	12
Gulu ...	74	729	—	803	30	71	1,017	1	1,088	74
Hoima ...	26	416	36	442	25	43	432	42	475	26
Jinja ...	33	1,838	140	1,871	91	39	679	64	718	33
Kabale ...	28	325	4	353	46	29	351	18	380	28
Kakamari ...	4	69	1	73	2	—	54	—	54	4
Kampala ...	9	616	21	625	15	6	546	16	552	9
Kitgum ...	9	348	4	357	67	5	131	—	136	9
Lira ...	19	476	27	495	46	89	596	15	685	19
Masaka ..	20	321	47	341	25	8	350	26	358	20
Masindi ...	22	783	66	805	38	10	455	—	465	22
Mbale ...	379	1,649	99	2,028	73	354	3,524	232	3,878	379
Mbarara ...	24	221	30	245	21	22	267	5	289	24
Moroto ...	Records incomplete	—	—	—	—	—	136	6	136	—
Mubende ...	16	183	1	199	20	10	231	7	241	16
Mulago and Gaols ...	154	4,390	441	4,544	217	149	2,876	216	3,025	154
Do Sub-Dispensaries	—	—	20	—	—	—	—	—	—	—
Namasagali ...	10	406	39	416	—	3	153	5	156	10
Soroti ...	111	927	20	1,038	42	24	2,507	31	2,531	111
Other Sub-Dispensaries	69	1,137	27	1,206	184	—	—	—	—	—
Moyo ...	—	16	—	16	—	—	—	—	—	—
TOTALS ...	1,128	17,270	1,102	18,398	1,082	1,016	16,731	742	17,747	1,059

\*C.M.S. Hospital.

TABLE VII.

RETURN OF DISEASES (IN AND OUT-PATIENTS) FOR THE YEAR 1925.

Diseases.	Total Cases.	Deaths.	Diseases.	Total Cases.	Deaths.
INFECTIVE DISEASES :—			<i>Brought forward</i> ...	41,259	602
Beri-Beri ...	9	1	INFECTIVE DISEASES— <i>continued</i> :—		
Cerebro-Spinal Fever ...	40	24	Rabies ...	1	...
Chicken-Pox ...	649	...	Relapsing Fever ...	659	15
Dengue ...	2	...	Rheumatic Fever ...	70	...
Dysentery—Amœbic ...	565	61	Septicæmia ...	8	7
Bacillary ...	1,241	227	Trypanosomiasis (Sleeping Sickness) ...	153	...
Unclassified ...	1,006	43	Small-Pox ...	4	1
Endocarditis— <i>infective</i> ...	1	...	Syphilis (a) Primary ...	2,628	1
Enteric—Typhosus ...	19	2	(b) Secondary ...	6,864	3
Paratyphoid A. ...	11	2	(c) Tertiary ...	19,755	59
Paratyphoid B. ...	1	...	(d) Tertiary and Latent ...	437	2
Unclassified ...	4	...	(e) Inherited ...	6,602	17
Erysipelas ...	12	1	(f) Latent and Ante-natal ...	156	...
Gonorrhœa ...	4,560	7	(g) Syphilis and Gonorrhœa ...	8	...
Influenza ...	10,633	13	(h) Granuloma Pudendum ...	6	...
Leprosy—(a) Nodular ...	177	1	(i) Syphilis Unclassified ...	131	...
(b) Anæsthetic ...	395	4	(j) Rheumatoid Arthritis... ..	1	...
(c) Mixed ...	2	...	(k) Anterior Poliomyelitis ...	1	1
(d) Unclassified ...	6	...			
Malaria (a) Benign Tertian ...	2,313	1	Tetanus ...	1	...
(b) Sub-Tertian ...	5,770	25	Tuberculosis ...	34	3
(c) Quartan ...	38	...	do Surgical ...	7	...
(d) Mixed Infection ...	843	...	Whooping Cough ...	438	1
(e) Chronic ...	853	4	Yaws ...	5,871	2
(f) Clinical Malaria ...	10,810	14	Pyrexia of uncertain origin ...	6,344	7
(g) Cerebral ...	8	4	Pyæmia ...	2	...
Measles ...	187	1	Vaccinia ...	102	...
Mumps ...	207	...	Others ...	23	...
Plague ...	75	40	Blackwater Fever ...	77	7
Pneumonia ...	822	127			
<i>Carried forward</i> ...	41,259	602	<i>Carried forward</i> ...	91,642	728



TABLE VII—*continued.*RETURN OF DEATHS (IN AND OUT-PATIENTS) FOR THE YEAR 1925—*continued.*

Diseases	Total Cases.	Deaths.	Diseases.	Total Cases.	Deaths.
<i>Brought forward</i> ...	91,642	728	<i>Brought forward</i> ...	114,101	766
INTOXICATIONS :—			Diseases of the Ear.—		
Alcoholism ...	5	...	Inflammation ...	2,340	...
Others ...	5	...	Otitis Media ...	588	...
			Others ...	1,171	...
GENERAL DISEASES :—			Diseases of the Nose.—		
Anæmia ...	217	3	Rhinitis ...	443	...
Anæmia—Pernicious ...	3	1	Coryza ...	524	...
Diabetes ...	5	...	Epistaxis ...	2	...
Exophthalmic Goitre ...	1	...	Goundou ...	2	...
Gout ...	3	...	Others ...	117	...
Hodgkin's Disease ...	1	...			
Myxœdema ...	4	...	Diseases of the Circulatory System.—		
Rickets ...	3	...	Pericarditis ...	3	...
Scurvy ...	6	...	Endocarditis ...	9	2
Debility ...	854	7	Disease of the Heart ...	121	13
Inanition ...	1	...	Arterial Sclerosis ...	3	...
Others ...	62	2	Aneurism and Aortic Aneurism ...	9	1
			Myocarditis ...	1	...
			Thrombosis ...	1	...
			D.A.H. ...	228	...
			Others ...	42	1
LOCAL DISEASES :—			Diseases of the Respiratory System.—		
Diseases of the Nervous System.			Laryngitis ...	318	11
Sub-Section 1.			Bronchitis ...	37,165	20
Neuritis ...	123	...	Broncho-Pneumonia ...	283	10
Hemiplegia ...	1	...	Gangrene of Lung ...	...	1
Myelitis ...	3	...	Emphysema ...	9	...
Hydrocephalus ...	1	...	Pleurisy (including effusion) ...	167	1
Encephalitis ...	2	...	Empyema ...	12	1
Abscess of Brain ...	7	2	Phthisis ...	78	15
Congestion of Brain ...	2	...	Asthma ...	174	...
Meningitis—Unclassified ...	7	5	Pleurodynia ...	89	...
do Pneumococcal ...	2	1	Others ...	527	2
do Basal ...	1	1			
Cerebral Thrombosis ...	2	...	Diseases of the Digestive System.—		
do Hæmorrhage ...	2	1	Stomatitis ...	1,590	...
Tumour of Brain ...	1	...	Caries of Teeth ...	1,829	...
Paraplegia ...	1	...	Glossitis ...	42	...
Uræmia ...	1	1	Sore Throat ...	1,902	...
Others ...	86	2	Inflammation of Tonsils ...	601	...
			Gastritis ...	326	...
Sub-Section 2.			Ulceration of Stomach ...	4	...
Apoplexy ...	9	2	Hæmatemesis ...	17	...
Paralysis ...	35	4	Dilatation of Stomach ...	7	...
Chorea ...	3	1	Stricture of Stomach ...	2	...
Epilepsy ...	94	2	Dyspepsia ...	4,451	...
Neuralgia ...	2,444	...	Enteritis ...	43	2
Hysteria ...	16	...	Appendicitis ...	17	1
Paralysis Agitans ...	1	...	Colitis ...	122	1
Vertigo ...	1	...	Diarrhœa ...	7,165	24
Neurasthenia ...	10	...	Constipation ...	12,216	...
Headache ...	444	...	Colic ...	4,356	...
Others ...	282	...	Hæmorrhoids ...	54	...
			Hepatitis-Acute ...	21	...
Sub-Section 3.			Abscess ...	25	...
Mental Diseases.—			Cirrhosis ...	10	3
Idiocy ...	8	2	Jaundice ...	263	2
Mania ...	15	...	Peritonitis ...	7	1
Melancholia ...	4	...	Ascites ...	55	9
Dementia ...	1	...	Parotitis ...	3	...
Delusional Insanity ...	13	1	Obstruction of Intestines ...	1	...
Others ...	11	...	Cholecystitis ...	1	...
			Prolapsed Rectum ...	3	...
Diseases of the Eye.—			Pyorrhœa Alveolaris ...	46	...
Conjunctivitis ...	15,820	...	Gingivitis ...	48	...
Keratitis ...	99	...	Hernia.—Inguinal ...	20	1
Ulceration of Cornea and Abrasion ...	250	...	Femoral ...	1	...
Iritis ...	135	...	Umbilical ...	1	...
Optic Neuritis ...	7	...	Strangulated ...	7	4
Cataract ...	56	...	Unclassified ...	178	8
Leucoma ...	23	...	Others ...	548	7
Iritis and Cyclitis ...	34	...			
Panophthalmitis ...	6	...	Diseases of the Lymphatic System.—		
Glaucoma ...	10	...	Splenitis ...	207	1
Entropion ...	50	...	Inflammation of Lymphatic Gland ...	772	...
Ectropion ...	1	...	Suppuration of Lymphatic Gland ...	254	...
Trachoma ...	619	...	Lymphangitis ...	12	...
Myositis ...	1	...	Elephantiasis ...	38	1
Pannus ...	2	...	Ruptured Spleen ...	1	1
Pterygium ...	19	...	Others ...	82	...
Retinitis ...	1	...			
Blepharitis ...	67	...			
Others ...	456	...			
<i>Carried forward</i> ...	114,101	766	<i>Carried forward</i> ...	195,875	910

TABLE VII—continued.

RETURN OF DISEASES (IN AND OUT-PATIENTS) FOR THE YEAR 1925.

Diseases.	Total Cases.	Deaths.	Diseases.	Total Cases.	Deaths.
<i>Brought forward</i> ...	195,875	910	<i>Brought forward</i> ...	215,523	979
Diseases of the Urinary System.—			Diseases of Connective Tissue.—		
Acute Nephritis ...	42	13	Cellulitis ...	1,499	5
Bright's Disease ...			Abscess ...	2,350	8
Pyelitis ...			Elephantiasis ...	105	1
Calculus ...	1	...	Cancrum ...	2	1
Renal Colic ...	13	...	Oedema ...	4	...
Cystitis ...	112	3	Psoas Abscess ...	1	...
Hæmaturia ...	10	...	Gangrene ...	3	2
Others ...	24	7	Others ...	153	...
Diseases of the Generative System.—			Diseases of Skin.—		
Urethritis ...	44	...	Urticaria ...	126	...
Gleet ...	10	...	Eczema ...	420	...
Prostatitis ...	2	...	Boil ...	1,467	...
Soft Chancre ...	404	...	Carbuncle ...	9	...
Condyloma ...	35	...	Herpes ...	73	...
Inflammation of Scrotum ...	46	...	Psoriasis ...	65	...
Hydrocele ...	143	1	Oriental Sore ...	216	...
Orchitis ...	260	1	Tinea ...	468	...
Epididymitis ...	17	...	Scabies ...	15,826	...
Abscess of Testicles ...	4	...	Acne ...	62	...
Ovaritis ...	3	...	Prickly Heat ...	63	...
Ovarian Cyst ...	7	...	Ulcers ...	20,541	11
Edometritis ...	17	...	Onychia ...	55	...
Displacement of Uterus ...	13	...	Ecchymosis ...	1	...
Vaginitis ...	25	...	Others ...	424	1
Amenorrhœa ...	16	...	Injuries—General ...	85	12
Dysmenorrhœa ...	43	...	„ Local ...	29,711	53
Monorrhagia ...	107	...	Tumours.—		
Leucorrhœa ...	64	...	Abdominal and Pelvic ...	9	9
Abortion (Threatened, etc.) ...	99	2	Cyst ...	1	
Delayed Labour ...	21	5	Others ...	142	
Postpartum Haemorrhage ...	1	...	Malformations ...	7	...
Retained Placenta ...	15	2	Poisons.—		
Premature Birth ...	12	2	Arsenical ...	1	...
Puerperal Septicæmia ...	11	...	Mercurial ...	6	...
Mastitis ...	111	1	Others ...	28	1
Abscess of Breast ...	76	...	Parasites—Animal ...	4	...
Balanitis and Phimosis ...	27	...	Protozoa ...	3	...
Vulvo-vaginitis ...	2	...	Trematoda (Flukes) ...	21	1
Stricture.—Plain ...	62	7	Unclassified ...	1	...
With retention ...	4		Cestoda.—		
With Extravasation ...	7		Tænia Solium ...	21	...
With Fistulas ...	12		Tænia Saginata ...	750	...
Paraphimosis ...	9	...	Nematoda. —		
Unclassified ...	140	3	Ascaris ...	706	2
Cervicitis ...	10	...	Dracunculus ...	549	1
Sterility ...	1	...	Filariasis ...	33	...
Obstructed Labour ...	3	3	Ankylostomiasis ...	112	10
Salpingitis ...	14	2	Oxyuris ...	9	...
Toxæmia of Pregnancy ...	2	2	Others ...	23	...
Lacerated Perinum ...	7	...	Insecta.—		
Recto and Vesico Vaginal Fistula...	6	...	Myiasis ...	7	...
Hæmotokolpos ...	1	...	Jiggers ...	705	...
Pelvic Inflammation ...	1	...	Others ...	2	...
Ruptured Uterus ...	3	3	Snake-bite ...	52	1
Cystocoele ...	1	1	Insect-bite ...	23	...
Parametritis ...	2	...	Scorpion-bite ...	1	...
Parturition ...	193	4	Unclassified ...	380	...
Others ...	225	3	TOTAL ...	292,848	1,098
Diseases of Organs of Locomotion.—			Total Surgical Operations ...	1,976	...
Osteitis ...	73	...			
Arthritis ...	331	...			
Spondylitis ...	5	...			
Bursitis ...	36	...			
Myalgia (Rheumatism) ...	15,872	...			
Synovitis ...	251	...			
Lumbago ...	354	...			
Periostitis ...	3	...			
Kyphosis ...	1	...			
Osteomyelitis ...	5	4			
Others ...	176	...			
<i>Carried forward</i> ...	215,523	979			

In addition to the above the following cases were treated :—

	Cases	Deaths.
Railway Labour ...	8,611	...
Labour Camps ...	8,331	...
N.Y.D. ...	120	4
Examinations ...	2,086	...
Observations ...	420	...
TOTAL ...	19,568	1



TABLE A.

The following Table shows, by stations, the total number of cases treated, with deaths, at Government Hospitals and Dispensaries during the years 1923, 1924 and 1925 :—

Station.			1925		1924		1923	
			Total Cases.	Total Deaths.	Total Cases.	Total Deaths.	Total Cases.	Total Deaths.
Arua	...	...	4,883	12	4,207	29	3,394	18
Bombo	...	...	10,503	17	9,743	6	7,736	22
Butiaba	...	...	2,730	14	2,194	—	1,829	7
Entebbe	...	...	10,257	35	7,807	23	6,892	19
Fort Portal	...	...	9,483	1	7,254	—	5,745	1
Gulu	...	...	5,156	—	6,863	1	5,869	27
Hoima	...	...	6,565	36	7,323	42	3,939	38
Jinja	...	...	15,106	140	9,204	64	7,850	121
Kabale	...	...	3,986	4	4,755	18	3,753	16
Kakamari	...	...	1,671	1	1,431	—	1,788	3
Kampala	...	...	17,361	21	11,978	16	19,107	61
do Gaol	...	...	2,886	3	4,409	10	3,688	13
do Luzira Gaol	...	...	2,873	1	—	—	—	—
do Police	...	...	1,189	—	2,750	—	1,415	4
Kitgum	...	...	5,160	4	4,143	—	3,711	6
Lira	...	...	5,279	27	3,665	15	4,182	19
Masaka	...	...	8,977	47	8,918	26	5,401	24
Masindi	...	...	6,240	66	5,788	—	3,554	14
Mbale	...	...	12,863	99	12,634	232	9,368	186
Mbarara	...	...	6,939	30	6,560	5	6,031	28
Moroto	...	...	2,326	—	1,701	6	765	1
Mubende	...	...	3,916	1	4,073	7	3,989	13
Mulago and Sub-centres	...	...	—	—	16,262	206	11,382	62
Mulago	...	...	10,668	433	—	—	—	—
Namasagali	...	...	4,314	39	3,976	5	2,062	5
Soroti	...	...	8,726	20	22,493	31	7,454	12
Sub-dispensaries	...	...	—	—	76,345	—	48,610	27
Buganda :—								
Mulago	...	...	12,980	20	—	—	—	—
Masaka District	...	...	8,292	—	—	—	—	—
Western Province :—								
Kabale District	...	...	4,092	4	—	—	—	—
Mbarara District	...	...	10,685	—	—	—	—	—
Fort Portal District	...	...	5,452	—	—	—	—	—
Northern Province :—								
Arua District	...	...	1,927	1	—	—	—	—
Masindi District	...	...	2,951	—	—	—	—	—
Hoima District	...	...	4,447	—	—	—	—	—
Eastern Province :—								
Bukedi District	...	...	48,874	18	—	—	—	—
Busoga District	...	...	5,313	2	—	—	—	—
Lango District	...	...	806	—	—	—	—	—
Soroti District	...	...	16,972	2	—	—	—	—
TOTAL	...	...	292,848	1,098	246,476	742	179,514	747
N. Y. D. and Observations	...	...	540	4	—	—	—	—
Examinations	...	...	2,086	—	—	—	—	—
Railway Labour and Labour Camps	...	...	16,942	—	—	—	—	—
TOTAL	...	...	19,568	4	—	—	—	—

NOTE.—Bombo Hospital, Kampala Gaol, Luzira Gaol, Kampala Police and various labour camps were under control of Mulago during the year.

TABLE B.  
RETURN SHOWING THE MEDICAL STAFF AND THE PRINCIPAL MEMBERS  
OF THE SUBORDINATE STAFF.

Name and Qualifications	Rank of Appointment	Where stationed on Dec. 31, 1925	Remarks.
J. H. Reford, B.A., M.D., B.A.O. (Hnrs.), (R.U.I.) L.M. (Dub.), D.T.M. (Liverpool), D.P.H. (Dist.) (Camb.)	D.M.S.S. ...	Entebbe	
Major G. J. Keane, D.S.O., R.A.M.C., R. of O., M.D., D.P.H., D.T.M. (Liverpool)	D.D.M.(N.)S. ...	On leave	
G. R. H. Chell, M.R.C.S., L.R.C.P., D.P.H. ...	D.D.M.S. ...	Entebbe	Ag. D.D.M.(N.)S.
C. H. Marshall, F.R.C.S., (Edin.), M.B., B.S., M.R.C.S., L.R.C.P. (London.)	Surgical Specialist ...	Kampala	
G. D. H. Carpenter, M.B.E., B.A., M.D. (Oxf.), M.R.C.S., L.R.C.P., F.E.S., F.L.S., F.Z.S.	S.M.O. ...	Entebbe	Senior Medical Officer i/c Sleeping Sickness Measures
J. E. Hailstone, M.A. (Camb.), M.R.C.S., L.R.C.P., D.T.M. (London.)	Do ...	Arua	
Major R. J. A. Macmillan, D.S.O., T.D., M.B., Ch.B. (Edin.), D.T.M. (Liverpool)	Do ...	Entebbe	Ag. D.D.M.S.
W. L. Webb, M.R.C.S., L.R.C.P., M.B., B.S. (London), D.P.H., R.C.P.S.	Do ...	Mulago	
W. L. Peacock, M.B., Ch.B. (Glas.) ...	Do ...	On leave	
J. H. Neill, M.B., Ch.B. (Edin.) ...	Medical Officer ...	Jinja	Ag. S.M.O.
E. A. C. Langton, M.R.C.S., L.R.C.P. ...	Do ...	Mbarara	
N. Bligh-Peacock, B.Sc., M.B., Ch.B. (Glas.) ...	Do ...	On leave	
R. G. Griffin, L.M. & L.R.C.P. & L.R.C.S. (Irel.), D.P.H. (Dub.)	Do ...	Jinja	
S. W. T. Lee, M.B., B.Ch., B.A.O. ...	Do ...	Mbale	
A. T. L. Kingdon, M.R.C.S., L.R.C.P. (London) ...	Do ...	On leave	
J. C. St. George Earl, B.A., M.B., B.Ch. ...	Do ...	Hoima	
D. G. Garnett, M.A., M.R.C.S., L.R.C.P., M.B., B.Ch. ...	Do ...	Fort Portal	
J. P. Mitchell, O.B.E., M.D. ...	Do ...	Mulago	
A. J. Boase, M.R.C.S., L.R.C.P. ...	Do ...	Mulago	
Capt. F. P. Freeman, M.C., L.R.C.P. & S.I., L.A.H. ...	Do ...	Bombo	
A. C. Freeth, M.B., (U. Durh.) ...	Do ...	Entebbe	
F. V. Small, M.B., Ch.B., B.A.O. ...	Do ...	Masaka	
R. S. McElroy, M.B., Ch.B., D.P.H. ...	Do ...	Jinja	
T. H. Nolan, M.B., B.Ch., B.A.O. ...	Do ...	Lira	
L. D. Dennard, M.B., Ch.B., B.A.O. ...	Do ...	Mbale	
J. D. Reynolds, M.B., Ch.B., B.A.O. ...	Do ...	Mulago	
N. C. Macleod, M.B., Ch.B. ...	Do ...	Kaliro	
G. A. Sloan, M.B., B.Ch., B.A.O., L.M. ...	Do ...	Tororo	
S. Forrest, M.A., M.B., Ch.B. ...	Do ...	Masindi	
G. Louw, M.B., Ch.B. (Edin.), D.T.M. & H. (Lond.) ...	Do ...	Madi	
J. M. Gray, L.R.C.P., L.R.C.S. ...	Do ...	Mulago	
K. Lumsden, M.B., Ch.B., D.T.M. & H. (Lond.) ...	Do ...	Kitgum	
A. H. Maclean, M.B., Ch.B. ...	Do ...	Mulago	
J. C. Caldwell, M.B., C.M. (Edin.) ...	Do ...	Soroti	
L. E. S. Sharp, M.R.C.S., (Eng.), L.R.C.P. (Lond.), M.B., B.C. (Cantab.)	Medical Officer part time ...	Kabale	
J. M. Collyns, M.B., D.P.H. (Lond.), M.R.C.S., L.R.C.P.	D.D.S.S. ...	Entebbe	
H. R. Neilson, M.B., Ch.B., D.P.H. (Aberdeen) ...	Snr. S.O. ...	Kampala	
H. L. Duke, O.B.E., B.A., M.D., B.C., D.T.M. & H. (Camb.), Sc.D. (Cantab.)	Director of Laboratory ...	On leave	
M. Martin (Miss), M.B., Ch.B. (Edin.), D.P.H., D.T.M. & H. (London)	1st Asst. Bacteriologist ...	Entebbe	Ag. D. of L.
G. S. Bateman, L.D.S.R.C.S. (Eng.) ...	Dental Surgeon ...	Kampala	
C. Chorley, M.P.S. ...	Pharmacist ...	Entebbe	
J. Stewart ...	Laboratory Assistant ...	Entebbe	
E. C. Haddon ...	Do ...	Entebbe	
A. E. Baker ...	Do ...	On leave	
Miss E. M. Pratt, A.R.R.C. ...	Matron ...	On leave	
„ D. M. Ivers ...	Nursing Sister ...	On leave	
„ N. M. Adams ...	Do ...	Kampala	Acting Matron.
„ C. M. Beville ...	Do ...	Entebbe	
„ E. M. Stringer ...	Do ...	Kampala	
„ A. Miles ...	Do ...	Mbale	
„ W. A. Shambrook ...	Do ...	On leave	
„ G. M. Hawthorne ...	Do ...	Entebbe	
„ R. H. Bagot ...	Do ...	Hoima	
„ S. E. Oxley ...	Do ...	Kampala	
„ E. R. Brittain ...	Do ...	Mulago	
„ N. S. Boyd ...	Do ...	Kampala	
„ I. Baillie ...	Do ...	Mulago	
„ A. B. Jack ...	Do ...	Mulago	
„ E. A. McGill ...	Do ...	Jinja	
„ N. B. Freeman ...	Do ...	Mulago	
„ B. A. Buck ...	Do ...	Mulago	
„ A. E. Fichat ...	Do ...	Mulago	
„ J. F. Sneddon ...	Do ...	Kampala	



TABLE B—*continued.*RETURN SHOWING THE MEDICAL STAFF, ETC.—*continued.*

Name and Qualifications.	Rank of Appointment.	Where stationed on Dec. 31, 1925.	Remarks.
H. Flint ...	Confidential Clerk ...	Entebbe	
H. T. Bott ...	Office Superintendent ...	Entebbe	
F. G. Caldwell ...	Clerk ...	Entebbe	
P. J. L. Waters ...	Medical Storekeeper ...	Entebbe	
H. G. Smith ...	Superintendent Native Hospital	Mulago	
E. S. Smout ...	Superintendent Lunatic Asylum and Native Hosp'l	Hoima	
C. H. Lloyd ...	European Assistant Superintendent and Dispenser	Mulago	
W. O. Tindall ...	do ...	Entebbe	
C. W. G. Tiffin ...	Sanitary Inspector ...	Kampala	
R. J. Wilkinson ...	Supervisor of Native Inspectors	Busoga Dist.	

TABLE C.

## RETURN SHOWING THE ASIATIC MEDICAL AND CLERICAL STAFF.

Name.	Rank.	Where stationed on 31st December, 1925.	Remarks.
Achhru Ram, Rai Sahib	Assistant Surgeon	Kampala	
Karkhanis, A. D.	Senior Sub-Assistant Surgeon	Jinja	
Ram Chand	Sub-Assistant Surgeon	Masindi	
Ahmed Din	Do	Tororo	
Raja, K. J.	Do	Arua	
Mahindra, S. R.	Do	Entebbe	
Rao, A. V. S.	Do	Lira	
Faquir Chand	Do	On leave	
Karam Dad	Do	Masaka	
Menon, P. K. K.	Do	Fort Portal	Seconded from I. M. D
Pillai G. K.	Do	Mbale	
Nur Mohamed	Do	On leave	
Ghulam Haider	Do	Soroti	
Das, E. C.	Do	Gulu	
Gopal, Balmukand	Do	Bombo	
Pradhan, K. A.	Do	Mubende	
Pandit, V. B.	Do	Mbarara	
Barkat Singh	Do	Kampala	
Achhar Singh	Do	Namasagali	
Arangady, S. V.	Do	Kitgum	
Sohi, U. R.	Do	Kakamari	
Prashar, F. C.	Do	Mbulamuti	
Laroya, L. R.	Do	Kaliro	
Pindi Das	Do	Kakamari	
Fernandes, E. F. X.	Do	Kampala	
Mela Ram	Do	On leave	
Dhirat Ram	Do	Mbale	
Dharm Chand	Compounder	Jinja	
Ahmed Din Ahmedi	Do	Mulago	
Uberoi, D. C.	Do	Kampala	
Jai Singh	Do	Mpologoma	
Aliana, R. M.	Do	Kampala	
D'Mello, A.	Do	Entebbe	
Rusteau (Miss) J.	Asiatic Nurse	Kampala	
D'Souza, M. P. D.	Asiatic Assistant Storekeeper	Entebbe	
D'Souza, M. N.	1st Grade Clerk	Entebbe	
Sanhu, S. S.	2nd Grade Clerk	Entebbe	
Moniz, C.	Do	Entebbe	
D'Lima, U. B.	Do	On leave	
Gunewardene, D. J.	Do	Entebbe	
D'Souza, J. C.	3rd Grade Clerk	Mbale	Entered 2nd grade 17-11-25.
Martyris, S. X.	Do	On leave	
D'Mello, F. X.	Do	Kampala	
Sant Singh	Do	On leave	
Senaratne, B. S.	Do	Entebbe	
Gomes, S. M.	4th Grade Clerk	Entebbe	
Desai, M. I.	Do	Jinja	
Fernandes, J. A.	Do	Entebbe	
Harnam Singh	Do	Kampala	
Dias, H. R. A.	Do	Entebbe	

TABLE D.

SHOWING PRESENT STAFF AND HOSPITAL ACCOMMODATION FOR EACH DISTRICT, 1925  
(MEDICAL AND SANITARY BRANCHES COMBINED).

BUGANDA KINGDOM.

Area in Square Miles—22,370.

Total Population—789,124

	Entebbe.	Masaka.	Mengo.	Mulago.	Mubende.
European Staff ... ..	1 Medical Officer 2 Nursing Sisters	1 Medical Officer	1 Surgical Specialist 1 Matron 4 Nursing Sisters 1 S.S.O. 1 Sany. Inspector	1 S.M.O. 5 Medical Officers 1 Matron 4 Nursing Sisters 1 Superintendent 1 Asst. Supt. and Dispenser 1 Lab. Assistant	—
Asiatic Staff ... ..	1 S.A.S. 1 Compounder 1 Sany. Inspector 1 Asiatic Cook	1 S.A.S. 1 Sany. Inspector	1 A.S. 2 S.A.S's. 2 Clerks 1 Compounder	1 Compounder 1 Clerk	1 S.A.S.
Native Staff :—					
A. Medical and Surgical—Male	10	20	15	140	3
Female	—	2	1	20	—
B. Sanitation ... ..	3	3	24	40	1
C. Sleeping Sickness ... ..	—	—	—	—	2
D. Menial Staff ... ..	8	9	57	100	2
Number of Beds :—					
A. Medical and Surgical					
European ... ..	6	—	15	—	—
Asiatic ... ..	3	—	14	—	—
Native—Permanent ... ..	28	12	—	220—306	12
Temporary ... ..	—	24	—	—	12
B. Isolation					
European ... ..	—	—	—	—	—
Asiatic ... ..	—	—	—	—	—
Native—Permanent ... ..	—	—	—	—	—
Temporary ... ..	13	8	—	—	—

Mengo includes the Stations Kampala and Bombo. and the Townships of Port Bell and Mbale.

TABLE D (A).

EASTERN PROVINCE

Area in Square Miles—36,292.

Total Population—1,178,323.

	Busoga.	Bukedi.	Teso.	Lango.	Labor and Karamoja.
European Staff ... ..	1 S.M.O. 1 Sany. Officer 1 Sany. Inspector 1 Supervisor Plague Insp. & Vaccinators 1 Nursing Sister	3 Medical Officers 1 Nursing Sister	1 Medical Officer	1 Medical Officer	Nil
Asiatic Staff ... ..	1 Senr. S.A.S. 1 S.A.S. 1 Compounder 1 Clerk	2 S.A.S's. 1 Compounder 1 Clerk	1 S.A.S.	1 S.A.S.	1 S.A.S.
Native Staff :—					
A. Medical and Surgical					
Male ... ..	43	37	20	6	3
Female ... ..	3	1	2	—	—
B. Sanitation ... ..	8	17	4	4	—
C. Sleeping Sickness ... ..	—	—	—	—	—
D. Menial Staff ... ..	16	25	5	3	1
Number of Beds :—					
A. Medical and Surgical					
European ... ..	4	3	—	—	—
Asiatic ... ..	6	—	12	—	—
Native—Permanent ... ..	66	42	20	30	—
Temporary ... ..	20	68	50	22	6
B. Isolation.					
European ... ..	—	—	—	—	—
Asiatic ... ..	—	—	—	—	—
Native—Permanent ... ..	16	—	—	—	—
Temporary ... ..	—	20	20	—	—
Convalescent Camp accommodation for ... ..	—	45	—	—	—

Busoga includes the Stations Jinja and Namasagali and the Townships of Iganga and Kaliro, Sub-Dispensaries and Labour Camps.



TABLE D (B).  
WESTERN PROVINCE.

Area in Square Miles—13,766.

Total Population—577,128.

	Ankole.			Toro.			Kigezi.		
European Staff ... ..	...	...	...	1 Medical Officer	1 Medical Officer	1 Medical Officer (part time)	...	...	...
Asiatic Staff ... ..	...	...	...	1 Sub-Assistant Surgeon	1 Sub-Assistant Surgeon	Nil	...	...	...
Native Staff :—									
A. Medical and Surgical—Male ...	...	...	...	15	11 and 3 Learners	8	...	...	...
Female ...	...	...	...	—	—	—	...	...	...
B. Sanitation ... ..	...	...	...	—	1	1	...	...	...
C. Sleeping Sickness ... ..	...	...	...	3	1	2	...	...	...
D. Menial Staff ... ..	...	...	...	7	11	2	...	...	...
Number of Beds :—									
A. Medical and Surgical									
European ... ..	...	...	...	—	—	—	...	...	...
Asiatic ... ..	...	...	...	—	—	—	...	...	...
Native—Permanent ... ..	...	...	...	24	—	—	...	...	...
Temporary ... ..	...	...	...	22	14	80	...	...	...
B. Isolation.									
European ... ..	...	...	...	—	—	—	...	...	...
Asiatic ... ..	...	...	...	—	—	—	...	...	...
Native—Permanent ... ..	...	...	...	—	—	—	...	...	...
Temporary ... ..	...	...	...	—	—	20	...	...	...

TABLE D (C).  
NORTHERN PROVINCE.

Area in Square Miles—23,734.

Total Population—437,737.

				Bunyoro.	Gulu.	Chua.	West Nile.
European Staff	...	...	...	2 Medical Officers 1 Nursing Sister 1 Superintendent	Nil	1 Medical Officer	1 S.M.O. (Arua) 1 M.O. (Moyo)
Asiatic Staff	...	...	...	1 Sub-Assist. Surgeon	1 S.A.S.	1 S.A.S.	1 S.A.S. (Arua)
Native Staff :—							
A.	Medical and Surgical—Male	...	...	50	10	5	9
	Female	...	...	9	—	—	—
B.	Sanitation	...	...	11	—	1	1
C.	Sleeping Sickness	...	...	1	—	1	4 (Moyo)
D.	Menial Staff	...	...	47	3	1	5
Number of Beds :—							
A.	Medical and Surgical						
	European	...	...	—	—	—	—
	Asiatic	...	...	—	—	—	—
	Native—Permanent	...	...	44	—	—	—
	Temporary	...	...	48	26	12 Huts — Accommodation for 48	28 (Arua) 14 (Rhino Camp) 20 (Moyo)
B.	Isolation						
	European	...	...	—	—	—	—
	Asiatic	...	...	—	—	—	—
	Native—Permanent	...	...	—	—	—	—
	Temporary	...	...	60	—	—	—

Bunyoro includes :—Hoima, Masindi, Butiaba, Sub-Dispensaries and Labour Camps.

## SECTION VI.

### LEGISLATION.

See Section III, page 39.

#### REGISTRATION OF MEDICAL PRACTITIONERS AND DENTISTS.

The Ordinance governing registration came into force on July 1st, 1913, since when and up to December 31st, 1925, the following have been placed on the register :—

Registered Medical Practitioners	...	...	...	96
Registered Medical Practitioner and Dentist	...	...	...	1
Dentists ... ..	...	...	...	2
Licensed Medical Practitioners	...	...	...	61

The numbers actually on the register on December 31st, 1925, were as follows :—

Registered Medical Practitioners	...	...	...	51
Registered Medical Practitioner and Dentist	...	...	...	1
Dentists ... ..	...	...	...	2
Licensed Medical Practitioners	...	...	...	27

## SECTION III.

**SANITATION.****General Review of Work Done.**

## ADMINISTRATIVE.

The title of the Medical Officers in the Sanitation Division were changed as follows :—

Chief Sanitation Officer to Deputy Director of Sanitary Service.

Sanitation Officer to Senior Sanitation Officer.

Medical Officer of Health to Sanitation Officer.

No member of the European Staff was on leave during the year.

Dr. R. S. McElroy, Medical Officer, was appointed Sanitation Officer on probation, and took up his duties at Jinja as from 19th December, 1925.

Mr. W. V. Kendall, Sanitary Inspector, who was transferred to the Municipal Department on June 1st, is to return to the Medical Department as from January 1st, 1925.

A third Sanitary Inspector for Mbale, Eastern Province, was already on his way out on December 31st. He arrived in January, 1925, and was posted to Kampala to relieve Mr. C. W. G. Tiffin, proceeding on short leave on March 8th, 1925.

During the Deputy Director of Sanitary Service's absence on tour, the Senior Sanitation Officer deputised for him on the Factories and Central Town Planning Boards.

## LEGISLATION, Etc.

The Infectious Diseases (Infected Ships) Rules, 1925, amending the 1923 rules, came into force on November the 24th.

No new areas were declared infected during the year.

Under the Townships Ordinance, Lugazi, Kyagwe County, Buganda Kingdom, was proclaimed a township on March 21st.

## FACTORIES BOARD.

Five meetings were held during the year.

The Deputy Director of Sanitary Service, Dr. J. M. Collyns, again drew the attention of the Board to the widespread prevalence of serious defects, structural as well as sanitary, that had come to his notice on his tours of inspection.

A circular memorandum to all factory owners was then drawn up giving the Board's views with reference to the almost universal disregard of the provisions of the Ordinance and the rules, and advising them (the owners) of the Board's intention of taking the strongest action possible, consistent with the rules, to enforce compliance with the rules and with all lawful orders issued.

The annual review of the work of the Factories Board appears in the Annual Report of the Public Works Department.

## CENTRAL TOWN PLANNING BOARD.

For some considerable time a change has been contemplated with regard to the administration and constitution of the Central Town Planning Board.

The matter having been fully considered, the Board recommended that the duties of the Chairman and Executive Officer devolved more appropriately upon the Land Officer than upon the Director of Medical and Sanitary Services. By notice in the *Gazette* dated 14th April, 1925, the Board was reconstituted by His Excellency the Governor as follows :—

The Land Officer (*Chairman*).

The Director of Medical and Sanitary Services.

The Director of Public Works.

The Deputy Director of Sanitary Service.

The annual review of the activities of the Board will appear in the Annual Report of the Land and Survey Department.



## EPIDEMIC DISEASES.

*Plague.*

947 cases with 869 deaths compared to 887 with 801 deaths in 1924.

The disease was confined to the Buganda Kingdom and the Eastern Province; the following administrative districts were those mainly affected:—

The Mengo District in the Buganda Kingdom and the Budama and Busoga Districts in the Eastern Province.

The following are the figures for the last three years:—

			Buganda Kingdom		Eastern Province.	
			Cases	Deaths	Cases	Deaths
1923	...	...	111	96	827	818
1924	...	...	114	103	773	698
1925	...	...	215	208	732	661

## Detailed table of cases reported:—

			Township		District.		Total.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
BUGANDA KINGDOM.								
MENGO DISTRICT:—								
Kyadondo County	...	...	...	...	33	32		
Kampala	...	...	27	25	...	...		
Port Bell	...	...	11	10	...	...		
Kyagwe County	...	...	...	...	47	46		
Bulemezi County	...	...	...	...	86	84		
Bugerere County	...	...	...	...	2	2	206	199
ENTEBBE DISTRICT:—								
Entebbe	...	...	9	9	...	...	9	9
EASTERN PROVINCE.								
BUSOGA DISTRICT:—								
Bugabula County	...	...	...	...	50	50		
Namasagali	...	...	1	1	...	...		
Kigulu County	...	...	...	...	118	118		
Bukoli County	...	...	...	...	2	2		
Bulamogi County	...	...	...	...	12	12		
Luuka County	...	...	...	...	1	1		
Jinja	...	...	31	28	...	...		
Bugweri County	...	...	...	...	2	2	217	214
BUKEDI AREA:—								
i. Bugweri District	...	...	...	...	17	13		
ii. Bugishu District—								
S. Bugishu	...	...	...	...	12	12		
iii. Budama District—								
Bunyuli County	...	...	...	...	184	159		
Budama County	...	...	...	...	158	141		
Tororo	...	...	28	26	...	...		
Bugwe County	...	...	...	...	53	43		
Mjanji Port	...	...	12	11	...	...	464	405
LANGO DISTRICT:—								
Eruti County								
Lira	...	...	2	1	...	...		
Maruzi County	...	...	...	...	2	...		
Kwania County	...	...	...	...	4	4		
Kumam County	...	...	...	...	38	32		
Dokolo County	...	...	...	...	5	5	51	42
TOTALS	...	...	121	111	826	758	947	869

## BUGANDA KINGDOM:—

Except for a small outbreak at Entebbe in November, 9 cases with 9 deaths, the disease was confined to the Mengo District. The large increase in the number of cases being due to a sharp epidemic in Bulemezi County, and to an increase in the number of cases in the township of Kampala and Port Bell. (See report for Mengo District.

## EASTERN PROVINCE :—

*Busoga District.*—217 cases with 214 deaths. Here the bulk of the cases occurred in *Kigulu County*. The disease which had occurred in sporadic form during the first eight months, suddenly took on epidemic form in September, the last four months accounting for 95 cases out of a total of 118.

*Bugabula County.*—50 cases with 50 deaths, December being the only month when it became serious.

*Luuka County.*—32 with 29 deaths. All the cases, but one, occurred at Jinja Port. Sporadic cases had been occurring there since May, 1924, and these continued up to March, 1925. No more cases occurred until September, when it suddenly broke out amongst the labour at the Pier and Railway Camp, 27 cases with 24 deaths occurring.

*Bukedi Area.*

*Bugweri District.*—A sharp outbreak occurred in December at Budaka, on the main Mbale-Jinja road, 16 cases with 12 deaths occurring, one case with one death also occurred in the same county.

*Bugishu District.*—Southern Bugishu. Occurred only in sporadic form during the year, 12 cases with 12 deaths.

*Budama District.*—This district which is only about one-third the area of Busoga District accounted for 435 cases with 380 deaths, or approximately 46% of the total Uganda cases. Plague was epidemic throughout the entire district practically all the year.

*Budama County.*—186 cases with 167 deaths including 28 cases with 26 deaths which occurred at the Administrative Headquarters, Tororo.

*Bunyuli County.*—184 cases with 159 deaths, and Bugwe County 65 cases with 54 deaths, including 12 cases and 11 deaths, at Mjanji Port.

*Lango District.*—A short and sharp epidemic broke out in July at Kelle Port, Kumam County, 30 cases being reported with 27 deaths during that month. It re-occurred during September, 8 cases with 5 deaths, but has since totally subsided.

Two cases with one death occurred at Lira, the Headquarter station.

## ANTI-PLAGUE MEASURES

## PERSONAL PROPHYLAXIS.

*Inoculations.*—76,703 compared with 31,836 in 1924. These were distributed as follows :—

## BUGANDA KINGDOM :—

Entebbe District	...	...	...	3,224	
Masaka District	...	...	...	5	
Mengo District	...	...	...	17,693	20,922
				<hr/>	

## EASTERN PROVINCE :—

Busoga District	...	...	...	11,812	
Bukedi Area					
Budama District	...	...	...	22,484	
Bugweri District	...	...	...	14,689	
Railway Construction	...	...	...	6,167	
Lango District	...	...	...	579	55,731
				<hr/>	

## WESTERN PROVINCE.—

Kabale District ...	...	...	...	50	50
				<hr/>	<hr/>

TOTAL	...	<hr/>	<hr/>	76,703
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During the year a vaccine prepared at the Entebbe Laboratory has been used throughout.

In the Mengo District, where careful data have been kept *re* all Plague cases, it appears obvious that immunity, and, at that, only very partial, is not conferred until 14 days after inoculation, and that it certainly does not last longer than a period of three months.

#### RAT CAMPAIGN.

This was carried out on a large scale in the Eastern Province. In the Mengo District, Buganda Kingdom, I have found returns from outside parts so unreliable, being obviously faked, that rat drives are now confined to the Townships of Kampala, Port Bell, Bombo and their environs, where the numbers can be checked.

The following figures were returned for the year :--

Buganda Kingdom	48,911	(Mengo District 25,087, detailed under Mengo Report)
Eastern Province	9,821,779	(Bukedi 6,741,819, Busoga 1,117,457)
Northern Province	2,364	
Western Province	5	
<hr/>		
TOTAL ...	9,873,059	
<hr/>		

#### POISON.

Barium Carbonate has again proved very satisfactory, and is in great demand by the natives (Mengo District) as it is easy to make up and is very efficacious.

I have personally used it in connection with ginneries, railway sheds, pier godowns, gaols and labour lines, and the results have been more than satisfactory.

Samples of "Farmer's Ratmousine" were given a trial, and proved satisfactory, but on account of its nature (Phosphorus) the preparation of baits is anything but pleasant, and the native would certainly not use it.

#### PUBLIC PROPHYLAXIS.

##### *Routine Sanitary Measures.*

1. Quarantining of all sick and segregation of all contacts.
2. Dethatching or burning of all infected huts, depending on the type of case, and type of hut.
3. If necessary, quarantining or evacuating whole villages, or closing down infected routes.
4. Intensive rat destruction in infected and threatened areas.
5. Disinfection of, and if necessary closing of infected buildings of the permanent type, such as occur in the larger townships, and general sanitary measures as regards removal of refuse, and other conditions liable to attract or harbour rats, and to the proper storage of rat-attracting material.

##### *Small-Pox.*

Figures for the last three years :—

			1923		1924		1925
Cases	...	...	97	...	7	...	13
Deaths	...	...	10	...	1	...	4

The prevalence of this disease continues to be low, and, I maintain, proves beyond a doubt the efficacy of:

- (1) The Lymph supplied by Entebbe Laboratory, and
- (2) The system of vaccination as carried out by trained vaccinators.

The distribution of cases is as follows:—

	Township.		District.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.
BUGANDA KINGDOM.						
Bugerere County ...	—	—	2	—	3	—
Kyadondo County—						
Port Bell ...	1	—	—	—		
EASTERN PROVINCE.						
Busoga District—						
Bulamogi County ...	—	—	5	3	10	4
Bukedi Area—						
i. Bugishu District,						
S. Bugishu ...	—	—	2	—		
ii. Budama District						
Bugwe County ...	—	—	3	1		
TOTAL ...	—	—	—	—	13	4

The general population is becoming slowly but surely protected, and, except for a small religious sect, the Malakites, attend at the various county centres fairly willingly.

VACCINATIONS.

During the year 96,970 were performed (compared to 78,896 in 1924) of which 61,238 were recorded as successful. As a general rule only about 70% turn up for arm inspection, and, taking this as approximately correct, the percentage of successful amongst those inspected works out at about 90%, which I consider is probably a true finding.

BUGANDA KINGDOM :—						
Mengo District	...	...	..	...	15,382	
Masaka District	...	...	...	..	9,761	
Entebbe District	...	...	...	...	1,766	26,909
					<hr/>	
NORTHERN PROVINCE :—						
Bunyoro District	...	...	...	...	3,717	3,717
					<hr/>	
EASTERN PROVINCE :—						
Busoga District	...	...	...	...	1,863	
Bugweri District	...	...	...	...	35,062	
Budama District	...	...	...	...	12,876	
Teso District	...	..	...	...	15,079	64,880
					<hr/>	
WESTERN PROVINCE :—						
Ankole District	...	...	...	...	1,464	1,464
					<hr/>	
					TOTAL	96,970
					...	<hr/>

Unfortunately one still sees many natives, whose scars point to past septic infection.

This has resulted not only from their personal efforts to nullify the effects of vaccination, but also I am afraid to faulty technique on the part of the vaccinators.

The usual method employed of cross scratching, produces a relatively large abraded surface, which is soon covered by a hard crust of serum and blood through which the eruption cannot pierce.

The result is a central ring of vesicles round the scarified area, leaving a central irritated wound to invite infection. I have personally tried with success, and am now having instructions typed, *i.e.*, the following technique:—

The lymph is first placed on the prepared arm in two drops, one inch apart. The point of a needle is then moistened in a drop and a scratch one inch



long is made downwards. The same procedure is carried out with the second drop and the lymph gently rubbed into the little wounds made. The necessary vesiculation of half a square inch is obtained by this method, and, as practically no blood is drawn no crust forms and no central wound to invite septic infection.

### CEREBRO-SPINAL MENINGITIS.

325 cases with 174 deaths compared with 148 cases and 106 deaths in 1924. Distributed as follows:—

	Township.		District.		Total.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
BUGANDA KINGDOM.						
Entebbe District	...	...	1	1		
Mengo District:—						
Kyadondo County—						
Kampala	...	13	...	10		
Namirembe	...	7	...	4		
Balemezi County	...	...	1	1	— 22	16
EASTERN PROVINCE.						
Busoga District:—						
Bugabula County—						
Namasagali	...	7	...	5		
Luuka County—						
Jinja ...	...	7	...	6		
Bukedi Area:—						
i Bugwere District—						
Mbale	...	3	...	3		
ii Bugishu District—						
N. Bugishu	...	...	2	2		
iii Budama District—						
Tororo	...	1	...	1		
Teso District:—						
Serere County	...	...	1	1		
Kumi County	...	...	18	14		
Soroti County	...	...	12	9		
Lango District:—						
Kwania County—						
Nabieso ...	...	...	8	7	— 59	48
NORTHERN PROVINCE.						
Chua District	...	...	2	...	— 2	
WESTERN PROVINCE.						
Kigezi District:—						
Kabale ...	...	1	...	1		
Bufumbira County	...	...	207	100		
Kinkizi County	...	...	34	9	— 242	110
TOTAL	...	...	...	...	325	174

The large total this year is due to the continuation and spread of the epidemic which started in October, 1924, in Kinkizi County, Kigezi District, Western Province.

It was very severe in January, and appeared to be well in hand at the end of April, when it recrudesced, 84 cases occurring in May.

The number of cases gradually lessened, and no cases have been reported since October.

I feel some explanation is necessary, as the above figures do not agree with the headquarter's monthly cables to the Secretary of State, being somewhat in excess.

The reason in the case of the Buganda Kingdom (where the cables give nine and actual total is 22) is that many cases occurring were only reported in the monthly hospital returns to the Director of Medical and Sanitary Services and were not reported to me, and therefore my weekly Infectious Diseases wires for the District (from which wires I understand the cables are made up) did not mention them.

Another reason is that Mission Hospitals did not report cases, and the number was not ascertained until the end of the year, when the figures were asked for to enable me to make out my report. Infectious diseases notification cards are being prepared for distribution to all non-Government Hospitals, so that this discrepancy should not occur in future.

### ENTERIC FEVER (*see* Appendix No. II).

#### DYSENTERY.

There has been a large increase in the number of cases reported during the year—2,812 cases with 331 deaths, the increase being mainly in the bacillary and unclassified form.

These figures do not include the 347 cases and 47 deaths reported by the Medical Officer in charge Railway Construction.

Comparison with the two previous years is as follows:—

		1923		1924		1925	
		Cases	Deaths	Cases	Deaths	Cases	Deaths
Amœbic	...	166	6	392	2	565	61
Bacillary	...	290	13	603	20	1,241	227
Unclassified	...	72	2	183	23	1,006	43
TOTALS	...	528	21	1,178	45	2,812	331

The following districts suffered most:—

#### *Amœbic.*

The stations of Butiaba, Masindi and Hoima, all in Bunyoro District, Northern Province, accounted for 75% of the whole total of 565.

#### *Bacillary.*

Mengo District, Buganda Kingdom, 897 cases with 176 deaths (Mulago alone reporting 793 cases with 176 deaths) supplied the bulk of the cases; Jinja, Masindi and the Kabale District accounting for most of the others.

#### *Unclassified.*

343 cases were reported from the Northern Province as follows:—

Arua and District 219, Masindi 79 and Butiaba 45.

Mengo District, Buganda Kingdom, 262 cases with 22 deaths.

The remainder were divided up fairly evenly between Mbarara and Fort Portal in the Western Province and Lango District in the Eastern Province.

A very large percentage of these Dysentery cases occurred amongst imported foreign labour at labour camps. This labour is mainly Banalwanda; and is physically and mentally of a very poor type.

The consensus of Medical opinion is that the following factors are responsible, both for the primary infection, as well as for its extension.

i. The complete change in environment, and more especially in food, added to a poor physical condition on arrival.

ii. Unsatisfactory preparation of food, especially of the maize flour ration, which is rarely properly cooked, and in addition to this, the very necessary fresh vegetable ration is often unobtainable.

iii. The absence of any system for protecting the cooked food from contamination through dust, flies, etc.

iv. The general insanitary condition of most camps with special reference to latrine arrangements.



A great improvement in the health of the labour is anticipated during 1926.

The permanent camps are to be constructed after the type at present being put up by the railway for their labour; special attention to be paid to kitchens, food stores, water supply and general conservancy, etc.

#### *Treatment.*

The treatment by salines was the one generally in favour for the bacillary type, although the Medical Officer in charge Railway Construction found castor oil more valuable.

#### INFLUENZA.

10,633 cases reported with 13 deaths, Bukedi Area, Eastern Province, accounting for 6,473 of them. Mbarara and Kabale, Western Province; Arua, Northern Province; and Mengo District, Buganda Kingdom, also reported a fair number of cases.

#### LEPROSY.

585 cases with 5 deaths.

Type:—Nodular	...	...	...	...	177
Anæsthetic	...	...	...	...	395
Unclassified	...	...	...	..	11
Mixed	...	...	...	...	2

Practically all the cases were from the Eastern Province, the Districts of Teso, Lango and Mbale being mainly concerned. A few cases, 32 with one death, were reported in Mengo District, and 13 with no deaths from Terego, Arua District, Northern Province.

#### MALARIA.

20,635 cases with 48 deaths (S.T. 25, Cerebral 4) were reported, being a great increase over the previous two years. S.T. cases have been reduced by 25% but Clinical Malaria, and to a lesser degree B.T. mixed and chronic cases have increased.

District incidence in the worst infected places is as follows:—

Mengo District, Buganda Kingdom	...	...	...	8,339
Bukedi District, Eastern Province	...	...	...	3,183
Busoga District, „ „	...	...	...	2,671
Teso District, „ „	...	...	...	1,031

#### SPIRILLUM FEVER.

659 cases with 15 deaths, compared to 852 with 12 deaths in 1924.

This infection is as usual practically confined to the Ankole and Kabale Districts, Western Province.

Ankole reported 188 cases and Kabale 275.

83 cases with six deaths occurred in Mengo District, Buganda Kingdom, and these were practically all in Banalwanda labour, who had to pass through the above infected areas on their journey down. (See Mengo District Report.)

#### HELMINTHIC DISEASES.

*Cestodes*.—T. Saginata—750 cases reported. Fort Portal 370 and Mbarara 179 accounting for the main bulk.

*Ascaris lumbricoides*.—706 cases of which 573 were treated in stations. 437 of these latter coming from Fort Portal.

*Dracunculus*.—549. Kitgum District, Northern Province, 190 cases.

The cases at Namasagali 81, Jinja 68 and Kampala 62 can practically all be traced to this area.

*Ankylostomiasis*.—This is universal throughout the Protectorate. 112 cases reported with 10 deaths, of these 47 with eight deaths occurred in the Mengo District, Buganda Kingdom.

The position in regard to this disease is the same as was reported by Dr. Collins last year.

*Filariasis*.—33 cases. Soroti, Eastern Province (25).

*Snake-bite*.—30 cases, 1 death.

#### INFECTIVE JAUNDICE.

The Senior Medical Officer, Arua, Northern Province, reported a series of cases, 81 with two deaths being actually observed at Arua Station, of Jaundice of an epidemic type. He also says that many others occurred in the district.

The monthly incidence was as follows:—

July, 2 ; August, 2 ; September, 3 ; October, 22 ; November, 39 ; and December, 13.

One European was attacked, and Malaria was suspected. This, however was, ruled out.

From the mildness of the cases and the prolonged jaundice these were probably cases of the mild type of Weil's Disease commonly known as Camp Jaundice.

#### ANTI-MALARIAL MEASURES.

These are mainly measures taken to eliminate breeding places, the following being the usual methods employed:—

i. Drainage and reclamation of swampy areas in townships. This embraces all works connected with clearing, grading, and training channels, filling in of or draining borrow-pits, bush clearing, cultivation, etc.

ii. Use of oil and larvicides in tanks, and collections of water, whose removal is impracticable.

iii. Sanitary measures, such as regular inspection of compounds, waste land, water supplies, including tanks and gutters, etc., for conditions favourable for harbouring or breeding mosquitoes, and the necessary action taken.

#### *Personal Prophylaxis*.—

This comes under two heads: Quinine prophylaxis, and anti-Mosquito protection.

There is no doubt that the second of these is the more valuable, and undoubtedly amongst Europeans it is carried out more thoroughly than the first.

#### *Under the heading Anti-Malarial Measures*.—

I consider that some mention should be made with reference to tanks, as prolific breeding places for *Culex* and *Stegomyia* in our townships.

Oiling is unsatisfactory, and, as they are our main drinking water suppliers, objectionable.

Until the time, which, for Kampala, at any rate, appears as far off as ever, when water supplies are laid on, something must be done to abate this mosquito nuisance in and around our houses.

Dr. Horn's Trap, or a modification, could be easily fitted to our present tanks, and I feel certain would be successful. Also overflow pipes and sludge-cocks should be insisted on.

#### GENERAL SANITATION.

For summary of routine work in Entebbe, Kampala and Jinja—see Table IV.

*Water Supply*.—The Jinja scheme, as mentioned last year has been approved and it is expected to be completed by the end of 1926.

With reference to Kampala, I understand that a scheme, provisional however, and only relating to actual position of service reservoirs, and to line of supply pipes, has been drawn up. The Geological Department have spent some time during the year boring near the swamp area, but I believe the result has not furnished a satisfactory alternative to the Lake as a source.

*Conservancy*.—See remarks in the Mengo District Report, which indicate that an endeavour is being made to make this service more satisfactory, and also more in accordance with Public Health standards.

*Swamp Drainage*.—This mainly concerns Kampala (for details of work see Mengo District Report).



It was hoped that by the appointment of a Municipal Engineer and a European Overseer to the Kampala Municipality that all labour and works on the swamp area could be properly supervised.

These officers arrived late in the year and commenced their duties respectively at the end of September and the beginning of November, the Municipal Engineer relieving the Building Inspector transferred to the Public Works Department.

Unfortunately it has been found impossible for these officers to carry out this work, their other duties connected with roads, buildings, drainage, etc., fully occupying their time.

It has been proposed that the Forestry Department co-operate with the Municipal Department in the reclamation of this area, but even so, a whole time overseer would be indispensable.

At present the Railway, in their area, are doing a great deal to help the situation by raising the level of the ground, and filling in all depressions.

The most difficult area to deal with will be the old brickfields area, and it will take years before this part can be reclaimed.

### ISOLATION HOSPITAL.

The new Isolation Hospital at Kampala has not materialised yet, but a suitable site has been definitely fixed on and our requirements have been laid down, and a start is expected to be made early in the year, and a part of it completed before 1927.

With the exceptions of Entebbe and Jinja, both of which have some type of permanent isolation quarters, all other stations have only temporary huts of various types in which to house and treat cases of infectious diseases. This arrangement is, to say the least of it, iniquitous. It is unfair to the unfortunate patient, as well as to the medical attendant, and I am sure leads to concealment of cases.

Stations in which the Asiatic community is to any degree numerous, should, before others, be supplied with small permanent isolation wards at the earliest.

### STAFF.

#### *Present Staff.*

EUROPEAN—Deputy Director of Sanitary Service, Senior Sanitation Officer, Sanitation Officer (since December 19th).

2 Sanitary Inspectors (Kampala and Jinja).

1 Sanitary Inspector arriving January, 1926.

ASIATIC — 2 Sanitary Inspectors

NATIVE— Various Sanitary Inspectors, Plague Inspectors, Vaccinators, Anti-Malarial Headmen, etc.

### RECOMMENDATIONS.

That sufficient staff, *i.e.*, three extra sanitation officers, be asked for, in order to allow the necessary attention to be given to preventive medicine in the different provinces of this Protectorate.

In most districts, the District Medical Officer is fully occupied with curative medicines, and is quite unable, even if qualified for this branch of medical work, without his own work suffering, to tackle efficiently problems of public health, and sanitation, such as housing conditions, town planning, factories, drainage, water supplies, etc., to say nothing of questions dealing with infectious diseases, their prevention and control. As an example take the Bukedi Area, Eastern Province. Here we have Plague endemic, and local conditions favour its spread. It is thickly populated, there is an extensive cotton traffic, with its attendant ginneries, buying stores and large rat population; and absolute networks of roads rendering efficient quarantining almost impossible.

It is quite impracticable to expect a District Medical Officer to deal effectually with outbreaks in such an area, and to also attend to his own duties.



The districts of Mengo, Busoga, Teso and Lango might all come into the same category, but here, in the first two we have whole-time Sanitation Officers.

Preventive medicine; except as regards Venereal Diseases has had very little encouragement in Uganda, probably because it was realised, and correctly too, that the initial difficulties to be overcome, would be beyond the power of the very inadequate staff available.

Venereal Diseases are understood by the Asiatic and native, and they have before them a definite goal, "To be cured." Not so, however, are Public Health and Sanitation measures which are equally for their good.

The native and in most cases the Asiatic is perfectly comfortable and satisfied, living in overcrowded and squalid dwellings; the presence of filth, garbage, and general rubbish lying about conveys nothing out of the ordinary to his mind, as he has not been educated enough to know better, and he, whenever possible, disregards, perhaps through ignorance, lawful orders.

In order to slowly break down this universal prejudice against, and prevailing ignorance of hygiene, in its widest sense, a largely augmented staff of qualified men is essential.

*My Recommendations, therefore, are as follows:—*

A Sanitation Officer for Bukedi Area and Teso.

A Sanitation Officer with headquarters at Masindi to be responsible for the Northern Province and Lango District.

A Sanitation Officer for the Western Province and Masaka District.

One of the latter two to relieve the Senior Sanitation Officer when on leave, so as not to necessitate the Deputy Director of Sanitary Service or his deputy having to work from Kampala.

One extra European Sanitary Inspector for relief duties, for training native sanitary orderlies, and for district work under a Sanitation Officer when required. This man, and any future man, must hold certificates granted by the Royal Sanitary Institute or other recognised body.

#### SANITARY ORDERLIES.

These are generally recruited from among ex hospital boys, but, with a few exceptions, their knowledge of the work is very limited.

It has been found impossible to give these boys a proper course of training, practical work under the supervision of a European Sanitary Inspector (when available) being the most that could be done. Unless these men can undergo a course of training at the Medical School, Makerere, I suggest that the extra European Sanitary Inspector (as asked for above) working under the Senior Sanitation Officer should hold courses of lectures in Kampala, that only educated applicants be entered and that posts be filled only from pupils who satisfy the Deputy Director of Sanitary Service by examination that they are competent to carry out the necessary duties.

#### PLAGUE INSPECTORS AND VACCINATORS.

As the knowledge necessary for the performance of these duties is easily acquired, and as this class of man is very adverse to transfer, I consider that local applicants should be recruited for these posts, and locally trained. The great advantage being their knowledge of the natives and the districts in which they have to work.

#### ISOLATION HOSPITAL.

- i. Increase in the present inadequate Sanitation Staff.
- ii. The building of small permanent Isolation wards, especially for Asiatics at Masindi, Northern Province; Fort Portal and Mbarara, Western Province; Masaka and Bombo, Buganda Kingdom; Mbale, Tororo, Soroti, Lira, and Namasagali, Eastern Province.
- iii. Expediting the building of the Kampala Isolation Hospital.

H. R. NEILSON,

*Acting Deputy Director of Sanitary Service.*



## Mengo District Report.

PLAGUE. 206 cases with 199 deaths.

	Cases.	Deaths	Counties.			
			Kyadondo.	Kyagwe.	Bulemezi	Bugerere.
1923	107	92	64 (58)	19 (19)	24 (15)	Nil
1924	114	103	32 (27)	41 (36)	41 (40)	Nil
1925	206	199	71 (67)	47 (46)	86 (84)	2 (2)

The increase this year is largely due to an epidemic in the Sabawali's Gombolola, around Kalagala, Bulemezi, and a great increase in the number of cases in and around Kampala.

### *Kyadondo County.*

71 cases with 67 deaths.

*Kampala Township* accounted for 27 cases with 25 deaths, compared with two cases and one death in 1924. The disease first showed itself in February in the Public Works Department yard, infection probably being from infected rats from the railway area, as infected rats had been found at Port Bell, and plague shortly after broke out at the port.

Market Street and Main Street accounted for practically all the cases February, March, April, and May accounting for 21 cases 20 deaths. Eight Indians were infected in Kampala and all died.

*Port Bell.*—Plague broke out in February, all the cases but one being Railway employees. 11 cases with 10 deaths compared to one case with one death in 1924.

During April two cases occurred at *Gayaza*, and one near *Kira*. All these cases had come from the Kalagala District, visiting, and died within a few days of arrival.

Two cases were reported from *Gombe*, Gombolola of Sabawali, in June. They both lived in one hut, and the corpse of the second was brought in for examination as plague was suspected. Both lung and spleen smears were positive. A short outbreak lasting three months, started at *Kawempe* (Narandas Rajaram's ginnery) in July, six cases with five deaths.

During October, three cases occurred in the female dormitory at *Nsambya* Mission, and all died. Rats infected with plague were afterwards found.

During September and October, four cases occurred at *Buso*, infection had been brought from Busika, Kalagala, Bulemezi, early in September, but no report was sent in until the second case died, when investigation clearly proved that it was fairly certain that the first case had also been plague; subsequently two others got infected and both died.

Only one case occurred among the Nakawa labour. This was a night-soil porter working in the Market Street area of the town, and he was probably infected while on duty as plague was then at its maximum in Kampala.

*Kyagwe.*—47 cases with 46 deaths.

The Nakifuma Gombolola was the one mainly affected, 36 cases with 35 deaths occurring.

The adjoining Gombolola, Kyampisi, had seven cases with seven deaths.

*Bulemezi.*—86 cases with 84 deaths.

60 cases with 58 deaths occurred around *Kalagala* (Gombolola of Sabawali) compared to nil in 1924. The epidemic started in March and went on until the end of September. There was a very distinct falling off in the number of cases from May to August, only eight cases occurring in the four months, March 15 (15), April 18 (18) and September 19 (17) accounting for over 86% of the total cases.



In practically all the cases the disease was of the pneumonic type.

*Bamunanika*.—20 cases with 20 deaths compared to 35 with 35 in 1924. Except for a sharp outbreak in June 11 (11) the disease never appeared serious.

*Wabikokoma*.—Six cases with six deaths.

The first three of these were all runaway contacts from the Kampala General Agency ginnery at Nakiwate, Nakifuma, Kyagwe, the fourth becoming infected from one of them.

The fifth case was the mother of the non-reported first case that died at Buso, Kyadondo, and she had run away after the child's death to Namaliga just outside the Bombo bazaar, where she died the next day of Septicæmic Plague.

The sixth case was also a runaway, and contact of the Buso cases.

*Bugerere*.—Two cases with two deaths in November.

First case occurred in Busana. He was an escaped contact from the Mbulamuti Quarantine in Busoga, Eastern Province.

The second case occurred at Kasokwe right in the north of Bugerere. He was a stranger, and was supposed to have come from Busoga side.

Cases amongst Asiatics. Nine cases with nine deaths, eight of which were in Kampala.

1. Trader. Nakifuma. Took ill 9-1-25, died 12-1-25. Reported by Mission. I went personally. Spleen smear + +.

2. Trader. Main Street. Took ill 20-3-25, died 24-3-25. Bubonic.

3. Transport agent. Market Street. Working between Port Bell Pier and Railway Sheds. Corpse. Took ill 19-3-25, died 22-3-25. Spleen + +. Lungs +. Blood +.

4. Wife of trader living in same block as No. 2, Main Street, was the only one of contacts not inoculated, as she was pregnant. She took ill on 29-3-25, aborted a.m. 1-4-25, placenta retained for several hours. N.K. 0.6 grammes on 31st. Died 6 p.m. 1-4-25. Bubonic.

5. Indian trader. Main Street, same block as Nos. 2 and 4. Took ill 21-4-25, died 24-5-25. N.K. gramme and iodine into bubo. Severe epistaxis before he died. Bubonic. Had been inoculated on 11-4-25.

6. Caretaker. Khoja Khana. North Street. Taken ill 28-4-25, died 14-5-25, Bubonic. N.K. 0.6 grammes twice and iodine into bubo. No bacilli found after seventh day. Died ultimately of pneumonic. Had been inoculated on 1-4-25.

7. Trader. Market Street. Taken ill 25-4-25 and treated by Mr. Lahna Singh until 27th for Malaria, and on that date he left for Damji Kachera's ginnery, mile 28 Toro Road, and died there on 30th. Corpse was brought in, and spleen showed *B. Pestis* + +.

8. Child. Main Street. Same block as Nos. 2, 4 and 5. Took ill 30-6-25, died 3-7-25. Septicæmic. Had been inoculated on 22-3-25.

9. Trader. Mr. Abdulaziz. Main Street. Gave history of a blow on left thigh about 20th July from steering wheel of his car. He applied some Indian *dawa* and pain eased, on the 21st and 22nd July he had fever, but did not call a doctor in until the 28th when a small bubo was discovered in the left femoral region. He had been inoculated four months previously.

He had N.A.B. 0.6 grammes intravenously twice and iodine twice into bubo, and appeared to be getting better but he became worse on the 28th and died early on the 31st.

*Recoveries*.—During the year seven people recovered, all were Bubonic cases.

Case 1. Child male, 7. Muganda. Nagalama, not inoculated, no treatment.

Case 2. Adult male, 40. Rwanda, inoculated 23 days before treated. 0.6 grammes N.K. Port Bell.

Case 3. Adult male, 20. Muganda. Station-master's boy, not inoculated, treated 0.6 grammes. N.K. and iodine into bubo.



Case 4. Adult male, 20. Muganda. Ginnery employee, inoculated 90 days previously N.A.B. 0·6 grammes.

Case 5. Child male, 8. Muganda. Kalagala. Inoculated 16 days previously, no treatment.

Case 6. Adult male, 22. Muganda. Boy of Police clerk, not inoculated. Iodine twice into bubo, case of P. minor.

Case 7. Adult male, 29. Muganda. Kalagala Quarantine, not inoculated and as far as I can ascertain had only symptomatic treatment.

*Type of Disease.*—In 168 cases information *re* type was ascertained. Bubonic 74; glands affected not reported 12. I=24; F=13; C=3; Axillary=19; R and L I=1; R I and C=1; R I and Ax.=1.

*Septicæmic.*—Primary 41. Secondary to Bubonic 3. Pneumonic, 50.

*Sex Distribution.*—Males 122. Females 84.

*Age Incidence.*—Under 14=42; 15 to 25=44; over 25=120.

## ANTI-PLAGUE MEASURES

### 1. PERSONAL PROPHYLAXIS.

#### *Inoculation.*—

During the year 17,693 inoculations were performed (compared with 16,977 in 1924, and 5,813 in 1923) at the following centres:—

Kampala Township	...	...	...	3,377
Mengo, Nsambya, Makindye, Buso and Nangabo	...	...	...	5,150
Kyagwe	...	...	...	3,483
Bulemezi	...	...	...	4,494
„ Bombo	...	...	..	1,189

During the year 38 people who had been inoculated contracted plague, three only recovering, compared to 23 cases, three recovering in 1924.

Nine had been inoculated within a fortnight of contracting plague, and all died.

Thirteen had been inoculated within three months and over two weeks of contracting plague, and three recovered.

1st case had N.K. 0·6 grammes, intravenous Septicæmic  
 2nd „ „ N.A.B. 0·6 „ „ Bubonic  
 3rd „ „ No treatment Bubonic

### 2. PUBLIC PROPHYLAXIS.

#### *Rat Campaign.*

25,087 were killed, trapped, poisoned and found dead. Comparison with the two previous years:—

	1923	1924	1925
Killed in drives	9,766	8,969	8,306
Trapped	661	403	741
Poisoned	10,798	9,566	15,870
Found dead	24	50	170
Number examined	2,659	3,101	2,884
„ plague infected	14	2	55
Kampala Township	8,233	7,886	13,630
Outside	13,026	11,102	11,457

Infected rats were found in the following localities:—

Nsambya 4, Namirembe 1, Imperial Cotton Company's and Narandas Rajaram and Company's ginneries at Kawempe 13, Port Bell Pier 25, Railway Sheds 7, Kampala Duka 4, and Public Works Department 1.

*Poison.*—Barium Carbonate was used all the year except for a few weeks, when Farmer's "Rat mousine" was given a trial.

38,637 baits were laid in and around Kampala during the year, the following areas being baited regularly from March until December:—Port Bell Pier, Labour Lines, Gaol, Kampala Township, Police and Warders' Lines, Public Works Department, Municipal, Railway Sheds, Duka, and Namirembe. Kawempe, all three ginneries, Nsambya Mission.

*General Measures Employed.*

Quarantining of all contacts and if necessary infected villages. Dethatching or burning infected huts, as conditions necessitated. Action taken against all conditions liable to harbour rats and fleas.

Disinfection of all infected premises.

Distribution of poison and loaning of traps to all applicants.

## SMALLPOX.

Three cases with no deaths.

					Cases.		Deaths.
1923	...	...	...	..	3	...	0
1924	...	...	...	...	4	...	0
1925	...	...	...	...	3	..	0

Two of these cases occurred in Bugerere in January and the other at Port Bell in September.

I am rather doubtful *re* the diagnosis of the two Bugerere cases, as originally six cases were reported, but my head vaccinator reported only two as definite Smallpox, the others being Chickenpox. Several others were reported by chiefs, but all these I visited personally, and found the disease to be only Chickenpox.

			1923		1924		1925
<i>Vaccinations</i>	...	...	13,446	...	16,948	...	15,382
	Number inspected	...	5,529	...	9,838	...	10,709
	„ successful	...	3,649	...	8,741	...	7,397
	Per cent successful of actual number examined	...	66%	...	90%	...	69%

The following administrative areas were visited by my vaccinators:—

*Bulemezi* 15,053.—Sabadu (Kapeka) 512; Sabagabo (Nakaseke) 2,572; Sabawali (Kalagala) 3,968; Mutuba III. (Katikamu) 1,513; Mutuba III. (Wabikokoma) 2,689; Mutuba VII. (Makulubita) 1,846; Mutuba VIII. (Zirobwe) 1,953.

*Bugerere* 250.—Musale (Busana) 250.

*Kyadondo* 79.—Port Bell and Kampala.

At the end of the year I had nine vaccinators working in the district.

Five cases of vaccinia reported from Kampala.

## MENINGITIS.

22 cases with 16 deaths.

	1923.		1924.		1925.
	16 (12)	...	2 (2)	...	22 (16)
C.S.M.	...	...	...	...	9 cases with 9 deaths
M. Unclassified	...	...	...	10	„ „ 5 „
Pneumoccal	...	...	...	1	„ „ 1 „
Basal	..	...	...	2	„ „ 1 „

All cases except nine were treated at Mulago, the nine being one case near Bombo, seven cases at Church Missionary Society's Dispensaries, and an Indian from Mile 45, Masaka Road, who was treated at the Asiatic Hospital and died there.

## MEASLES.

323 cases were reported during the year, 82 only coming for treatment at Hospitals and Dispensaries.

## CHICKENPOX.

281 cases reported, 60 of which came for treatment.

## INFLUENZA.

General, and of a mild type throughout the district. 138 cases came for treatment 19 cases occurred among Europeans.



## MALARIA.

Hospitals and Dispensaries report 8,339 admissions with 21 deaths as follows:—

B. T.	...	...	...	...	...	1,905
S. T.	...	...	...	...	...	2,786
Q.	...	...	...	...	...	30
Mixed	...	...	..	...	...	494
Chronic	...	...	..	...	...	616
Cerebral	...	...	...	...	...	6
Clinical	...	...	...	...	...	2,502
						<hr/> 8,339 <hr/>

There were 188 admissions among Europeans, 84 of which were officials. One death from Cerebral Malaria occurred at Namirembe Hospital.

There were 203 admissions to the Asiatic Hospital, 84 of which were Government officials. Three deaths are recorded as caused by Malaria and complications, and three by Cerebral Malaria.

Malaria accounted for 391 admissions among Europeans and Asiatics out of a total of 1,073 admissions.

## BLACKWATER FEVER.

26 cases admitted, three of whom were European officials, Asiatic officials, Asiatic non-officials.

There were four deaths, all among Asiatics.

## DYSENTERY.

1,237 cases. 215 deaths were reported.

European:—Amœbic 7; Bacillary 5. No deaths.

Asiatics:—8, with one death.

Type.	Amœbic	...	...	...	78 with 17 deaths
	Bacillary	...	...	...	897 with 176 deaths
	Unclassified	...	...	...	262 with 22 deaths

The labour camps and the gaols at Kampala and Luzira accounted for over 85% of the total.

## ENTERIC.

31 cases with four deaths were reported during the year: of these two were Europeans, two Asiatics and 25 Natives.

Typhoid	...	...	...	...	17 with 2 deaths
Para. A.	...	...	...	...	10 with 2 deaths
Para. B.	...	...	...	...	1 with nil „
Unclassified	...	...	...	...	3 „ „

Most of these cases were in prisoners at the Mpanga Gaol, Port Bell. The probability is that it was due to carrier infection got outside during their daily work, as the prisoners whose duty kept them inside the prison compound, where food and water were clean and sanitary conveniences handy, did not become infected.

## SPIRILLUM FEVER.

83 cases with six deaths.

Three-quarters of these cases occurred in the Nakawa labour camp, among the Banyaruanda. The ticks must have been brought in in their blankets, etc., this being unavoidable in the absence of systematic disinfection of all new arrivals and sterilisation of effects, before admission.

## TUBERCULOSIS.

23 cases with two deaths were reported, eight being treated at Namirembe.

Europeans	...	...	...	3 with 1 death
Asiatics	...	...	...	4 with 1 death

## LEPROSY.

32 cases reported as follows:—

Nodular	...	...	...	11 with 1 death
Anæsthetic	...	..	...	13 „ nil „
Mixed	...	...	...	3 „ „ „
Unclassified (from Namirembe)	...	...	...	5 „ „ „

## BERI-BERI.

Four cases reported with one death.

Mulago	...	...	...	...	2	1 death
Mukono	...	...	...	...	2	nil

## DISEASE DUE TO ANIMAL PARASITES.

## 1. Trematodes.

Bilharzia	...	...	...	7 cases reported with 1 death.
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## 2. Cestodes.

Tapeworms	...	...	...	41
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## 3. Nematodes.

Ascaris	...	...	...	3
Filariasis	...	...	...	1
Ankylostomiasis	...	...	...	47 with 8 deaths.

Dracunculus 62 (47 of these were among Police and King's African Rifles and were contracted in the Nile Province.)

## VENOMOUS ANIMALS.

Eight cases of snake bite reported, no deaths.

## DEATHS AMONG EUROPEANS AND ASIATICS.

European Officials	...	...	...	...	1
Children of above	...	...	...	...	2
Non-Officials	...	...	...	...	3 (1)
Asiatic Officials	...	...	...	...	1
Non-Officials	...	...	...	...	41 (10)

The figures in brackets are from the Namirembe report.

Regarding Asiatics, the following diseases were mainly responsible for the total :—

Plague	...	...	...	...	9
Malaria	...	...	...	...	6
Blackwater Fever	...	...	...	...	4
Pneumonia	...	...	...	...	7

## ANTI-MALARIAL MEASURES.

General routine work by the native staff, consisting of six men. These were employed searching for larvæ and reporting on conditions suitable for mosquito harbouring and breeding. A daily average of 7·1 old tins, pots, etc., were removed from compounds, streets and waste land.

Small storm water holes were filled up, larger ones being treated with larvicide.

Larvæ were found on 227 occasions, June and October giving the highest count. *Culex* headed the list with 155, *Stegomyia* 57, *Anophelines* 15. *Anophelines* all came from the swamp area, and were mostly found in the old borrow pits and drains at the brickfields. *Culex* and *Stegomyia* were found there also, as well as in tanks, drums and barrels used for collecting rain water.

121 mosquito abatement notices were served as follows :—

Government tanks 103; private tanks, barrels 18 (7 summoned and convicted).

## SWAMP DRAINAGE.

Daily average of 116 paid labour were employed in this area during the year, varying from 72 in August to 213 in December.

*Prison Labour.*—

Averaging 50 was employed for the first two and a half months on various duties connected with this area. They were then officially taken off.

The duties of the swamp gangs and the work done are as follows :—

i. Clearing, grading and training existing channels. This work is done in rotation and the banks for from five to ten feet at each side are also cleared.

Main Nakivubo	...	...	...	81,063 linear ft.
Right bank	...	...	...	29,822 " "
Left "	...	...	...	26,516 " "
Kitante main channel	...	...	...	18,762 " "
Right bank	...	...	...	5,190 " "
Left "	...	...	...	1,890 " "



II. Clearing of weeds and grading of secondary earth drains leading to swamp area : 32,221 linear feet.

III. Long grass and bush clearing: 86·2 acres.

#### iv. Reclamation work.

This work has been mainly carried out as an anti-malarial measure. The area treated being the old Public Works Department brickfields which have now been given up.

This area was in a disgraceful condition, and an actual source of danger to the public, owing to the large number of old borrow pits, filled with water and breeding out countless numbers of *anophelines*.

Routine filling was carried on from 1924 by half our prison labour, until the middle of March when this was taken away, their work was unsatisfactory and of little use.

In October, as funds were available, and the condition was serious I obtained extra labour and using ordinary swamp labour as well, got down to systematic levelling and filling in of the pits.

During the three months, nine pits of a cubic capacity of 150,400 feet were filled in, the material used being township refuse, old bricks, ant heaps, and anything that was handy.

The condition is now greatly improved, but much yet remains to be done.

From the 1st of January, the Municipality took over the Agricultural labour, and since then an average of 20 men have been employed in the area (about  $1\frac{1}{2}$  acres) between Entebbe and Mengo Roads preparing ground for planting and reaping.

Sugar Cane. 14,980 sticks have been reaped, some has been sold to the Director of Uganda Transport, and the remainder used for Municipal cattle.

Maize. 1,263 lbs. reaped, value Shs. 105/21

Beans.	400	"	"	"	48/-
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## TOWNSHIP MASONRY DRAINS.

538 linear feet constructed during the year. These were at Bombo Road, Government Square and Main Street. Culverts, one constructed, and two re-made.

Roads. William Street formation 16 feet 1,219 linear ft.

„ „ „ metallē 661 „ „

South Street formation	16 feet	300	„	„
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Maintenance. 20 roads were patched as was rendered necessary.

7,000 linear feet of Jinja-road, and 600 linear feet of Junction-road were re-made.

## GENERAL SANITARY CONDITION OF TOWNSHIP

This, especially as regards the bazaar area, has not improved. It is most noticeable in the back premises of most of the old buildings, where, for many reasons, structural and otherwise, it is almost impossible to secure healthy conditions. The present system of rubbish removal is unsatisfactory in a commercial town of this size with its large trading population, both resident and diurnal, whose inborn custom of depositing refuse anywhere is difficult to check. Two one-ton tip motor lorries are on order, and should be available by September, 1926, for this work. These will be able to do several journeys per day, and should result in a very much more cleanly bazaar.

## NIGHT SOIL SERVICE.

This has been a constant source of worry, not only due to trouble with the labour employed, which has been even more frequent than in previous years.

The system itself, although probably capable of being carried out quite sanitarly in a small township, is in Kampala most insanitary and actually offensive.

This is hardly to be wondered at, when one realises that every night over 1,000 buckets have to be emptied and cleaned and that there are no facilities for cleaning them. Naturally therefore in the crowded duka area a genuine nuisance is caused.

The double bucket system, which it is proposed to introduce, at the earliest, should prove satisfactory. It will first be introduced into the European quarters, and afterwards into the bazaar area where a good deal of reconstruction and demolition will be necessary, as about 50% of these will be very shortly condemned.

## STREET LIGHTING.

This is also unsatisfactory. There are at present a certain number of kitson lamps in use. It is proposed doing away altogether with the oil lamps and substituting small kitson lamps.

## TANKS.

The following is the result of the latest inspection (February, 1926):—

		Cement		Iron		Overflow pipes		Sludge cocks		Mosquito proofing
Private	...	12	...	114	...	114	...	Nil	...	111
Government	...	121	...	18	...	23	...	46	...	139

From the above it is seen that very few of the Government tanks are supplied with the very necessary sludge cocks, and overflow pipes. The mosquito proofing in most cases is ineffectual, and unfortunately where it is effectual against mosquitoes, a great amount of the very necessary water is wasted.

## GENERAL INSANITARY CONDITIONS.

256 notices served, 21 convictions.

## STAFF.

*European*—1 Sanitary Inspector (Mr. Tiffin).

*Asiatic*— 1 Sub-Assistant Surgeon.

1 Clerk.

*Native*— Inspectors and Vaccinators (9) for varying periods.

## RECOMMENDATIONS FOR FUTURE WORK.

1. Laid on water supply for Kampala.

2. Until such time when the above supply materializes, it is very necessary that attention should be paid to our tanks, and that the structural defects existing should be remedied. These defects are as follows:—

- i. Ineffectual mosquito proofing in all cases.
- ii. Absence of overflow pipes in 80%, and
- iii. Absence of sludge cocks in 60%.

The above is the position as regards Government tanks in Kampala, and is most probably applicable to other stations.

As regards remedies:—

i. This has been discussed by the Director of Public Works and myself, and we decided that the fitting of Dr Horn's traps to all tanks would be effectual in abating this nuisance. The matter is being attended to.

ii. and iii. The remedy to these is obvious, and is being taken up with the Director of Public Works.

3. New Isolation Hospital. The land has been already chosen and requirements laid down.

4. Extension to Health Office, Kampala.

5. Removal of present Labour Camp, Nakawa, and the construction of a permanent one, nearer Kampala.

6. Reclamation of the swamp area, in conjunction with the Forestry Department, by the planting of Eucalyptus trees, and others, which have the power of absorbing moisture, and thus drying up the land.

7. The construction of more Government houses to relieve the acute house shortage at the present time.

8. Night soil service. The present system of single bullock revolving carts for removal of night soil is unsatisfactory especially in the bigger towns and the large staff necessary is a constant source of trouble.

Motor transport, plus the double bucket system would not only insure a more satisfactory and efficient service, but would also cut down annual expenditure on labour and transport.

9. Street Lighting. The use of oil lamps for this purpose is most unsatisfactory. They should all be scrapped, and kitson lamps substituted.

H. R. NEILSON,

*Acting Deputy Director of Sanitary Service.*



TABLE IV.

**Summary of Routine Sanitary Work done during the Year.**

## 1. NAME OF TOWN—ENTEBBE.

		Approximate area.	Number of proclaimed open spaces.
1923	...	12 square miles	13
1924	...	"	13
1925	...	"	13

## 2. POPULATION.

		NUMBER OF EUROPEANS.		NUMBER OF ASIATICS.		NUMBER OF NATIVES.		TOTAL.
		Males.	Females.	Males.	Females.	Males.	Females.	
1923	...	117	73	234	104	2,466	2,152	5,146
1924	...	107	69	223	87	2,366	2,052	4,904
1925	...	96	78	265	101	2,360	2,053	4,953

## 3. HOUSING.

		Number occupied by Europeans.	Number occupied by Asiatics.	Number occupied by Natives.
Number of Houses :—				
1923	...	96	138	385
1924	...	101	147	399
1925	...	85	152	391

## Number of Huts :—

1923	...	...	...	...	...	...	1,539
1924	...	...	...	...	...	...	1,450
1925	...	...	...	...	...	...	1,440

## 4. ERECTION OF NEW BUILDINGS DURING THE YEAR.

				1923	1924	1925
Number of houses built without sanction				—	—	—
Number of huts built without sanction				—	—	—

## ACTION TAKEN.

						Number of Prosecutions.	
						Huts.	Houses.
1923	...	...	...	...	...	—	—
1924	...	...	...	...	...	—	—
1925	...	...	...	...	...	—	—

## 5. LATRINES.

				For Males.		For Females.	
				Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—							
1923	...	...	...	5	24	—	—
1924	...	...	...	5	24	—	—
1925	...	...	...	5	24	—	—
Number of new public latrines erected during the year:—							
1923	...	...	...	—	—	—	—
1924	...	...	...	—	—	—	—
1925	...	...	...	—	—	—	—

LATRINES—*contd.*

	1923	1924	1925
Number of Private Latrines ... ..	375	397	392
Average number of pails of nightsoil removed daily ... ..	465	477	480
Average number of soiled pails removed and clean pails substituted	34	32	35
Number of nightsoil men employed to clean latrines and remove excreta	24	24	32*
Number of cesspools ... ..	1,011	976	776
Number of cesspools cleansed ... ..	—	—	—
Number of new cesspools constructed during the year ... ..	548	210	200
Number of old cesspools abolished ... ..	645	245	200

\*Includes 4 trench diggers.

## 6. REMOVAL OF REFUSE.

	1923	1924	1925
Number of dustbins ... ..	171	177	182
Number of carts at work daily to remove refuse from streets ... ..	9	10	10
Amount of refuse removed daily ... ..	27	30	33‡
Number of carts at work daily to remove refuse from yards and premises	} Included	} in above.	
Amount of refuse removed daily from yards and premises (cart loads)			
Number of men employed for removing refuse ... ..	18	20	21

‡Cart loads.

## 7. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average number of pails of Excreta.			Daily average number of cartloads of Refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1923	1924	1925	1923	1924	1925	1923	1924	1925
Buried or trenched ... ..	465	477	480	27	30	31	1	1	1
Burnt ... ..	—	—	—	—	—	—	—	—	—
Thrown into sea ... ..	—	—	—	—	—	—	—	—	—
Otherwise dealt with ... ..	—	—	—	—	—	—	—	—	—

## 8. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1923	1924	1925
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

## 9. WATER SUPPLY.

Nature of Water Supply.	1923	1924	1925
PIPE-BORNE WATER :—			
Source (river, lake, or spring) :—			
Number of stand-pipes along roads ... ..	—	—	—
Number of stand-pipes in compounds and houses ... ..	—	—	—
WELLS :—			
Public :—			
Number ... ..	30	28	27
Number with pumps protected against surface water and mosquito-protected ... ..	—	—	—
Private :—			
Number ... ..	3	3	3
Number protected against surface water and mosquito-protected ... ..	—	—	—



9. WATER SUPPLY—*contd.*

Nature of Water Supply.				1923	1924	1925
TANKS :—						
Public :—						
Number mosquito-protected and served by pumps ...				—	—	—
Number above ground ...				—	—	—
Number mosquito-protected ...				—	—	—
Private :—						
Number underground ...				3	3	3
Number mosquito-protected ...				3	3	3
Number above ground ..				284	290	295
Number mosquito-protected (very few really mosquito proof) ...				284	290	295
Number of 400 gallons capacity or less ...				6	8	8
Number above 400 gallons ...				281	285	290
Nature of tank :—						
Wood ...				—	—	—
Iron ...				52	29	20
Concrete ...				232	264	275
Barrels :—						
Number ...				44	14	19
Number mosquito-protected ...				27	9	13

## 10. DRAINAGE.

Nature of Drainage.				Public.	Private.
Masonry drains :—					
Linear yards of masonry drains :—					
1923 ...				2,450	617
1924 ...				3,250	617
1925 ...				3,750	620
Linear yards reconstructed during the year :—					
1923 ...				—	—
1924 ...				—	67
1925 ...				—	5
Linear yards repaired during the year :—					
1923 ...				—	—
1924 ...				300	—
1925 ...				100	10
Linear yards of new drains constructed during the year :—					
1923 ...				289	—
1924 ...				800	—
1925 ...				500	3
Earth drains or ditches :—					
Number of linear yards of ditches cleaned :—					
1923 ...				No record	No record
1924 ...				108,000	500
1925 ...				108,000	500
Number of linear yards of ditches dug and graded :—					
1923 ...				No record	No record
1924 ...				500	50
1925 ...				500	50
Average frequency of clearing ditches of grass :—					
1923 ...				1 monthly	1 monthly
1924 ...				2 monthly	2 monthly
1925 ...				1½ monthly	1½ monthly

## 11. INSPECTIONS AND PROSECUTIONS.

				1923	1924	1925
Number of inspectors employed ...				2	3	3
Number of houses inspected ...				519	647	700
Number of houses where larvæ were found ...				24	44	52*
Number of notices served to remove conditions causing the breeding of larvæ ...				24	44	51
Number of persons fined for having mosquito larvæ on premises ...				—	—	—
Number of notices served to remove insanitary conditions on premises ...				62	214	130
Number of persons fined for not removing insanitary conditions after notice ...				—	—	—
Number of soda and aerated water factories inspected ...				1	1	1

\*Larvæ were found in 6 drains.

N. F. S. ANDREWS,  
for Officer in Charge of the District.

TABLE IV.

**Summary of Routine Sanitary Work done during the Year.**

## 1. NAME OF TOWN—KAMPALA.

		Approximate area.	Number of proclaimed open spaces.
1923	...	3,220 acres	8
1924	...	3,220 acres	8
1925	...	3,220 acres	8

## 2. POPULATION.

		NUMBER OF EUROPEANS.		NUMBER OF ASIATICS.		NUMBER OF NATIVES.		TOTAL.
		Males.	Females.	Males.	Females.	Males.	Females.	
1923	...	188	109	743	337	1,304	407	3,088
1924	...	197	113	774	362	1,423	468	3,337
1925	...	207	107	1,111	398	1,437	475	3,735

## 3. HOUSING.

		Number occupied by Europeans.	Number occupied by Asiatics.	Number occupied by Natives.
Number of Houses :—				
1923	...	153	416	537
1924	...	156	417	540
1925	...	156	419	542

## Number of Huts :—

1923	...	...	...	...	...	...	1,040
1924	...	...	...	...	...	...	1,043
1925	...	...	...	...	...	...	1,049

## 4. ERECTION OF NEW BUILDINGS DURING THE YEAR.

				1923	1924	1925
Number of houses built without sanction				—	—	—
Number of huts built without sanction				—	—	6*

\*Built by Engineer, Uganda Railway ; sanction afterwards given.

## ACTION TAKEN.

						Number of Prosecutions.	
						Huts.	Houses.
1923	...	...	...	...	...	—	—
1924	...	...	...	...	...	—	—
1925	...	...	...	...	...	—	—

## 5. LATRINES.

				For Males.		For Females.	
				Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—							
1923	...	...	...	16	74	2	14
1924	...	...	...	16	74	2	14
1925	...	...	...	16	74	2	14
Number of new public latrines erected during the year :—							
1923	...	...	...	—	—	—	—
1924	...	...	...	—	—	—	—
1925	...	...	...	—	—	—	—



LATRINES—*contd.*

	1923	1924	1925
Number of Private Latrines ... ..	856	977	991
Average number of pails of nightsoil removed daily ... ..	1,054	1,065	1,079
Average number of soiled pails removed and clean pails substituted ... ..	74	27	19
Number of nightsoil men employed to clean latrines and remove excreta ... ..	85	93	108
Number of cesspools ... ..	—	—	—
Number of cesspools cleansed ... ..	—	—	—
Number of new cesspools constructed during the year ... ..	—	—	—
Number of old cesspools abolished ... ..	—	—	—

## 6. REMOVAL OF REFUSE.

	1923	1924	1925
Number of dustbins ... ..	178	362	452
Number of carts at work daily to remove refuse from streets ... ..	16	16	16
Amount of refuse removed daily ... ..	74	96	96
Number of carts at work daily to remove refuse from yards and premises ... ..	16	16	16
Amount of refuse removed daily from yards and premises (cart loads) ... ..	68	68	68
Number of men employed for removing refuse ... ..	85	93	93

## 7. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average number of pails of Excreta.			Daily average number of cartloads of Refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1923	1924	1925	1923	1924	1925	1923	1924	1925
Buried or trenched ... ..	1,054	1,065	1,079	—	—	—	2	2	2
Burnt ... ..	—	—	—	—	—	—	—	—	—
Thrown into sea ... ..	—	—	—	—	—	—	—	—	—
Otherwise dealt with ... ..	—	—	—	142	164	164*	—	—	—

\* Used for filling up old P.W.D. excavations in the swamp area.

## 8. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1923	1924	1925
2	2	2

## 9. WATER SUPPLY.

Nature of Water Supply.	1923	1924	1925
PIPE-BORNE WATER :—			
Source (river, lake, or spring) :—			
Number of stand-pipes along roads ... ..	—	—	—
Number of stand-pipes in compounds and houses ... ..	—	—	—
WELLS :—			
Public :—			
Number ... ..	6	6	6
Number with pumps protected against surface water and mosquito-protected ... ..	6	6	6
Private :—			
Number ... ..	1	1	1
Number protected against surface water and mosquito-protected ... ..	1	1	1

9. WATER SUPPLY—*contd.*

Nature of Water Supply.				1923	1924	1925
TANKS :—						
Public :—						
Number mosquito-protected and served by pumps	...	...	...	—	—	—
Number above ground	...	...	...	—	—	—
Number mosquito-protected	...	...	...	—	—	—
Private :—						
Number underground	...	...	...	10	10	10
Number mosquito-protected	...	...	...	10	10	10
Number above ground	...	...	...	284	294	265
Number mosquito-protected (mostly ineffectual)	...	...	...	160	166	250
Number of 400 gallons capacity or less	...	...	...	160	166	88
Number above 400 gallons	...	...	...	134	138	177
Total tanks	...	...	...	—	—	275
Nature of tank :—						
Wood	...	...	...	—	—	—
Iron	...	...	...	227	229	132*
Concrete	...	...	...	57	75	133
Barrels :—						
Number	...	...	...	—	32	40
Number mosquito-protected	...	...	...	—	32	32

\*A number of iron tanks have been condemned and dismantled

## 10. DRAINAGE.

Nature of Drainage.				Public.	Private.
Masonry drains :—					
Linear yards of masonry drains :—					
1923	...	...	...	7,929	No record
1924	...	...	...	8,822	"
1925	...	...	...	8,987	"
Linear yards reconstructed during the year :—					
1923	...	...	...	169	"
1924	...	...	...	150	"
1925	...	...	...	14	"
Linear yards repaired during the year :—					
1923	...	...	...	492	"
1924	...	...	...	—	"
1925	...	...	...	—	"
Linear yards of new drains constructed during the year :—					
1923	...	...	...	899	"
1924	...	...	...	893	"
1925	...	...	...	165	"
Earth drains or ditches :—					
Number of linear yards of ditches cleaned :—					
1923	...	...	...	9,302	"
1924	...	...	...	8,409	"
1925	...	...	...	32,000	"
Number of linear yards of ditches dug and graded :—					
1923	...	...	...	45,511	"
1924	...	...	...	71,105	"
1925	...	...	...	163,243	"
Average frequency of clearing ditches of grass :—					
1923	...	...	...	12	"
1924	...	...	...	12	"
1925	...	...	...	12	"

## 11. INSPECTIONS AND PROSECUTIONS.

				1923	1924	1925
Number of inspectors employed	...	...	...	3	3	3
Number of houses inspected	...	...	...	2,362	2,732	3,043
Number of houses where larvæ were found	...	...	...	319	172	121
Number of notices served to remove conditions causing the breeding of larvæ	...	...	...	172	325	121
Number of persons fined for having mosquito larvæ on premises	...	...	...	—	17	7
Number of notices served to remove insanitary conditions on premises	...	...	...	165	463	256
Number of persons fined for not removing insanitary conditions after notice	...	...	...	11	59	21
Number of soda and aerated water factories inspected	...	...	...	2	2	2

H. R. NEILSON,  
*Senior Sanitation Officer,  
for Executive Officer, Township Authority.*



TABLE IV.

**Summary of Routine Sanitary Work done during the Year.**

## 1. NAME OF TOWN—JINJA.

		Approximate area.	Number of proclaimed open spaces.*
1923	...	2,560 acres	11
1924	...	2,560 acres	10
1925	...	2,560 acres	8

\* Tennis courts, Europeans, Goans. and Indians, and Sports Club grounds and one square; and square and one European children's playground.

## 2. POPULATION.

		NUMBER OF EUROPEANS.		NUMBER OF ASIATICS.		NUMBER OF NATIVES.		TOTAL.
		Males.	Females.	Males.	Females.	Males.	Females.	
1923	...	42	19	600	220	2,202	1,238	4,421
1924	...	50	22	615	250	2,500	1,600	5,037
1925	...	58	20	650	230	2,700	1,735	5,393

## 3. HOUSING.

		Number occupied by Europeans.	Number occupied by Asiatics.	Number occupied by Natives.
Number of Houses :—				
1923	...	67	324	—
1924	...	67	334	—
1925	...	68	347	—

## Number of Huts :—

1923	...	...	...	...	...	...	840
1924	...	...	...	...	...	...	1,090
1925	...	...	...	...	...	...	1,675

## 4. ERECTION OF NEW BUILDINGS DURING THE YEAR.

		1923	1924	1925
Number of houses built without sanction		—	—	—
Number of huts built without sanction		—	—	—

## ACTION TAKEN.

		Number of Prosecutions.	
		Huts.	Houses.
1923	...	—	—
1924	...	—	—
1925	...	—	—

## 5. LATRINES.

		For Males.		For Females.	
		Number.	Number of seats.	Number.	Number of seats.
Number of Public Latrines :—					
1923	...	46	51	—	—
1924	...	46	58	—	—
1925	...	4	20	46	58
Number of new public latrines erected during the year :—					
1923	...	3	7	—	—
1924	...	—	—	—	—
1925	...	—	—	—	—

LATRINES—*contd.*

	1923	1924	1925
Number of Private Latrines ... ..	331	344	360
Average number of pails of nightsoil removed daily ... ..	675	725	780
Average number of soiled pails (cleared twice daily) ... ..	331	344	360
Number of nightsoil men employed to clean latrines and remove excreta	39	54	80
Number of cesspools ... ..	43	45	3
Number of cesspools cleansed ... ..	—	—	3
Number of new cesspools constructed during the year ... ..	—	2	—
Number of old cesspools abolished ... ..	—	—	42

## 6. REMOVAL OF REFUSE.

	1923	1924	1925
Number of dustbins ... ..	50	54	1
Number of carts at work daily to remove refuse from streets ... ..	3	3	3
Amount of refuse removed daily ... ..	30	40	5½*
Number of carts at work daily to remove refuse from yards and premises	6	6	—
Amount of refuse removed daily from yards and premises (cart loads)	70	40	9
Number of men employed for removing refuse ... ..	50	54	22

\* Tons approximate.

## 7. MODE OF DISPOSAL OF EXCRETA, REFUSE AND OFFAL.

	Daily average number of pails of Excreta.			Daily average number of cartloads of Refuse.			Daily average number of cartloads of Slaughter House and Market Offal.		
	1923	1924	1925	1923	1924	1925	1923	1924	1925
Buried or trenched ... ..	700	725	780	60	80	—	3	4	1
Burnt ... ..	—	—	—	—	—	—	—	—	—
Thrown into sea ... ..	—	—	—	—	—	9	—	—	1
Otherwise dealt with ... ..	—	—	—	—	—	—	—	—	—

## 8. AVERAGE DAILY NUMBER OF CARTLOADS OF TIN CANS, BOTTLES, BROKEN CROCKERY, AND OTHER INCOMBUSTIBLE MATERIAL REMOVED FROM HOUSES, HUTS AND COMPOUNDS.

1923	1924	1925
11	10	Removed by owners of households.

## 9. WATER SUPPLY.

Nature of Water Supply.	1923	1924	1925
PIPE-BORNE WATER :—			
Source (river, lake, or spring) :—			
Number of stand-pipes along roads ... ..	—	—	—
Number of stand-pipes in compounds and houses ... ..	—	—	—
WELLS :—			
Public :—			
Number ... ..	—	—	—
Number with pumps protected against surface water and mosquito-protected ... ..	—	—	—
Private :—			
Number ... ..	1	1	1
Number protected against surface water and mosquito-protected ... ..	—	—	—



9. WATER SUPPLY—*contd.*

Nature of Water Supply.				1923	1924	1925
TANKS :—						
Public :—						
Number mosquito-protected and served by pumps				—	—	—
Number above ground				—	—	—
Number mosquito-protected				—	—	—
Private :—						
Number underground				—	—	—
Number mosquito-protected				—	—	—
Number above ground				65	78	79
Number mosquito-protected (very few of these are really mosquito-proof)				65	78	79
Number of 400 gallons capacity or less				62	75	76
Number above 400 gallons				3	3	3
Nature of tank :—						
Wood				—	—	—
Iron				45	45	45
Concrete				20	33	34
Barrels :—						
Number				—	—	—
Number mosquito-protected				—	—	—

## 10. DRAINAGE.

Nature of Drainage.					Public.	Private.
Masonry drains :—						
Linear yards of masonry drains :—						
1923	...	...	...	...	800	770
1924	...	...	...	...	1,728	820
1925	...	...	...	...	1,778	900
Linear yards reconstructed during the year :—						
1923	...	...	...	...	—	—
1924	...	...	...	...	—	—
1925	...	...	...	...	—	—
Linear yards repaired during the year :—						
1923	...	...	...	...	25	—
1924	...	...	...	...	Not known	—
1925	...	...	...	...	"	—
Linear yards of new drains constructed during the year :—						
1923	...	...	...	...	250	20
1924	...	...	...	...	928	42
1925	...	...	...	...	50	80
Earth drains or ditches :—						
Number of linear yards of ditches cleaned :—						
1923	...	...	...	...	1,600 yards including new township	
1924	...	...	...	...		
1925	...	...	...	...		
Number of linear yards of ditches dug and graded :—						
1923	...	...	...	...	Every month	
1924	...	...	...	...		
1925	...	...	...	...		
Average frequency of clearing ditches of grass :—						
1923	...	...	...	...	Every month	
1924	...	...	...	...		
1925	...	...	...	...		

## 11. INSPECTIONS AND PROSECUTIONS.

				1923	1924	1925
Number of inspectors employed				2	1	1
Number of houses inspected				324	334	5,859
Number of houses where larvæ were found				—	9	104
Number of notices served to remove conditions causing the breeding of larvæ				25	36	69
Number of persons fined for having mosquito larvæ on premises				—	—	1
Number of notices served to remove insanitary conditions on premises				100	95	31
Number of persons fined for not removing insanitary conditions after notice				—	—	15
Number of soda and aerated water factories inspected				1	—	2

A. O. FISHER,  
Executive Officer, Township Authority.

## APPENDIX No. I.

**Report on Blackwater Fever in Uganda for 1925.***By Major R. J. A. Macmillan, D.S.O., Acting D.D.M.S.*

1. During the year 81 cases of Blackwater Fever were treated, of which 22 ended fatally—two of these cases with nil deaths were treated and reported on by C.M.S. doctors.

The following table shows the number of cases, deaths and case mortality for the past 20 years:—

Year.	Cases.	Deaths	Case Mortality %.	Year.	Cases.	Deaths.	Case Mortality %.
1906	... 41	... 4	... 9·8	1916	... 46	... 10	... 21·7
1907	... 10	... 2	... 20·0	1917	... 49	... 8	... 16·5
1908	... 13	... 2	... 15·4	1918	... 40	... 7	... 17·5
1909	... 21	... 6	... 28·6	1919	... 83	... 18	... 21·7
1910	... 26	... 6	... 23·1	1920	... 56	... 7	... 12·5
1911	... 18	... 3	... 16·6	1921	... 62	... 15	... 24·1
1912	... 45	... 9	... 20·0	1922	... 83	... 14	... 16·8
1913	... 58	... 12	... 20·7	1923	... 71	... 17	... 24·0
1914	... 82	... 21	... 25·6	1924	... 70	... 23	... 32·8
1915	... 65	... 18	... 27·7	1925	... 81	... 22	... 27·1

2. *Locality.*—

*Buganda Kingdom*—26 cases with four deaths as against 23 cases with eight deaths in 1924.

*Western Province*—Nil cases with nil deaths as against one case with nil deaths in 1924.

*Northern Province*—Five cases with one death as against six cases with one death in 1924.

*Eastern Province*—50 cases with 17 deaths as against 40 cases with 14 deaths in 1924.

Although there is an increase in the number of cases in Buganda and the Eastern Province it is very doubtful whether there is any increase in the incidence as the European and Asiatic populations have greatly increased in these two provinces.

Nil cases again are reported from the Western Province.

3. *Seasonal Variation.*—

	1922	1923	1924	1925		1922	1923	1924	1925.
January	... 7	5	5	4	July	... 10	10	10	16
February	... 3	4	4	8	August	... 8	6	7	5
March	... 8	6	6	3	September	... 8	9	2	8
April	... 3	6	2	5	October	... 4	7	3	3
May	... 9	1	7	9	November	... 9	4	10	5
June	... 10	9	8	9	December	... 4	4	6	6

The greatest number of cases occurred in the month of July, and during this month the rainfall was recorded as being above normal and the mean temperature as being lower than normal. In other words this month was wetter and colder than usual.

The least number of cases occurred in March and October and in these months the rainfall was about normal but the temperature was warmer than usual.

Malaria had its greatest incidence in June and smallest in February.

4. *Statistics.*—(a) *Morbidity and Death Rates:*—

Europeans	... 10 cases	3 deaths.	Morbidity Rate 6·8.	Death Rate 2·06.
Asiatics	... 71 cases	19 deaths.	Morbidity Rate 9·8.	Death Rate 2·62.

(b) *Officials and Non-Officials:*—

	Cases	Deaths
European Officials	... 6	Nil
European Non-Officials	... 4	3
Asiatic Officials	... 13	1
Asiatic Non-Officials	... 58	18



(c) Sex.

			Europeans.		Indians.	
			Cases.	Deaths.	Cases.	Deaths.
Males	...	...	9	3	65	17
Females	...	...	1	Nil	6	2

(d) Age.

		Under 10	11-20	21-30	31-40	41-50	Unknown.	Total.
Cases	...	8	6	47	12	2	6	81
Deaths	...	2	1	15	1	—	3	22

(e) Residence in Tropics—Europeans only.—

			1-5 years.	6-10	11-15	16-20	Unknown.	Total.
Cases	...	...	2	3	1	2	2	10
Deaths	...	...	—	1	—	1	1	3

5. Previous attacks of Blackwater.—

25 of the cases under review had had previous attacks and seven of these died.

15 cases had had	1 previous attack and	3 died.
4 " "	2 " attacks	2 "
1 " "	3 " "	Nil "
3 " "	4 " "	1 "
1 " "	5 " "	Nil "
Nil " "	6 " "	Nil "
1 " "	7 " "	1 "

All these cases had histories of having had one or more malarial attacks since their previous Blackwater attack.

In para. 19 (c) of last year's Blackwater Fever Report stress was laid on this important point but it elicited no comment from the Colonial Advisory Medical Committee.

I would therefore emphasise the point again as 305 cases having now been carefully analysed I see no reason for altering the assertion made in the para. quoted above.

6. Predisposing Causes.—

Undoubtedly Blackwater Fever is of malarial origin. No case was recorded during the year under review where the patient had not previously suffered from Malaria.

7. Exciting Causes.—

From the records it would appear that almost anything will precipitate an attack of Blackwater Fever, e.g., worry, chill, over-exertion, quinine, alcohol, etc.

It would also appear that some cases develop Hæmoglobinuria with a lesser degree of malarial toxæmia than others—this would account for the numbers of slight and recurrent cases which are continually reported.

8. Quinine Habits.—The records are as follows:—

Regularly taken as prophylactic	...	...	...	...	10
Irregularly taken	...	...	...	...	53
Not taken (definitely)	...	...	...	...	9
Unknown	...	...	...	...	9

9. Mosquito Protection—House protected by wiring and use of sleeping net.—

House adequately protected and net used	...	...	...	4 cases
House inadequately protected and net used	...	...	...	40 "
House inadequately protected and net not used	...	...	...	33 "
Not stated	...	...	...	4 "

Of the ten cases who took quinine regularly as a prophylactic one lived in an adequately protected house and used a net ; six lived in an inadequately protected house and used a net ; three lived in an inadequately protected house and did not use a net.

Anopheles mosquitoes are present in most localities in Uganda.

10. *Blood Examinations.*—

In 13 cases the blood was examined prior to the attack—in six the result was negative, and in seven positive, six being S.T. and one being B.T.+S.T.

In 56 cases the blood was examined during the attack—in 31 the result was negative, and in 25 positive, 16 being S.T. and nine B.T.+S.T.

In seven cases the blood was examined after the attack and one was found to contain S.T. parasites.

The main characteristic of the differential count was the increase in large *mononuclear leucocytes*.

11. *Duration of Hæmoglobinuria.*—(a) In cases without relapse—74 cases with 20 deaths occurred :—

			Unrecorded	Under 1 day	1 day	Under 2 days	Under 3 days	Under 4 days	4½ days	6 days	10 days
Cases	..	..	6	18	5	17	16	6	4	1	1
Deaths	..	..	3	4	0	6	4	1	1	0	1

(b) In cases with relapse—Seven cases with two deaths occurred :—

Case	Duration of Original Attack	Interval	Duration of Relapse	Result
1	2½ days	5 days	7 hours	Recovery
1	1½ days	5½ days	6 hours	Recovery
1	2½ days	5½ days	60 hours	Died
1	1 day	7 days	3 days	Died
1	1½ days	8 days	16 hours	Recovery
1	2½ days	12 days	44 hours	Recovery
1	1½ days	15 days	23 hours	Recovery

12. *Cause of Death.*—22 deaths :—

17 due to Cardiac Failure, two due to Suppression and Cardiac Failure, two due to Suppression and Uræmia, one due to Exhaustion.

13. *Symptoms.*—The following were most constant :—

Thirst, Vomiting and Nausea, Jaundice, Enlarged Spleen (in 60% of which there was pain or tenderness), Rigor, Enlarged Liver, Pain over Loins.

14. *Albuminuria.*—Only four cases reported in which albumen was not present. *Casts* were reported in four cases—two of which were fatal.

Generally albumen is present in the urine for a day or so after the hæmoglobinuria has cleared up but in none of the cases which recovered have kidney lesions been recorded.

*Re-action.*—The urine was in 55 cases Acid, four cases Neutral, three cases Alkaline, 19 cases not recorded.

15. *Complications.*—Suppression 10, Retention 11, Uræmia three, Hiccough six.

16. *Treatment.*—The treatment that is recommended and that was generally followed was described in last year's report.

Attention is again drawn to the necessity of guarding against heart failure.

R. J. A. MACMILLAN, MAJOR,  
*Acting Deputy Director of Medical Service.*



## APPENDIX No. II.

**Annual Report on Enteric Fever for 1925.**

Thirty-five cases with four deaths were reported during the year, of these, two were Europeans, four were Asiatics and twenty-nine were natives. The four deaths occurred amongst the natives.

*Widal Test.*—19 cases were positive to *B. Typhosus*, 11 cases were positive to *Paratyphoid A*, one case was positive to *Paratyphoid B*, four cases Type not defined.

	Typhosus		Para A.		Para B.		Type not defined	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Europeans	1	—	1	—		—	—	—
Asiatics	2	—	2	—		—	—	—
Natives	16	2	8	2	1	—	4	—

Twenty-eight cases (including two Europeans and two Asiatics) occurred in Kampala, three cases in Bombo, two cases (both Asiatics) in Jinja, one case at Entebbe and one at Mubende.

**H. R. NEILSON,**  
*Acting Deputy Director of Sanitary Service.*

## APPENDIX No. III.

**Memorandum on the Relation between Medico-Hygienic Considerations and Labour Conditions.**

In order to arrive at the conditions which seem to call for adjustment from a purely medical point of view, I should like to be allowed to touch upon certain aspects of the labour question which are not strictly medical but which it appears necessary to refer to, for the proper consideration of medical recommendations, since medical and hygienic considerations are often reinforced by economic argument and *vice versa* and the relation between hygienic and economic aspects of the labour question is so intimate.

2. Although much has been done to improve conditions, for labourers partly from hygienic motives and partly by reason of the economic necessity of attracting volunteers, there still remains an enormous field for improvement and for essential reform and until these reforms have been effected the position regarding the creation of a permanent labour supply will in my opinion remain uncertain.

3. The first step has been taken in the publication of Labour Regulations and these, in spite of the criticism they have encountered by those who did not fully understand their purpose, are now accepted generally as proper and reasonable. They are in essence an elementary code providing for the supply of water, fuel, cooking arrangements, dwellings, a minimum ration, a maximum load, medical attendance and sanitary supervision.

4. It has to be recognized that in Uganda at least, and it is not unlikely that similar conditions have prevailed in neighbouring countries, our vision has been distorted by our comparatively recent passage from the stage when labour was supplied compulsorily to almost every one and little or no consideration of its needs was required. One might almost say that a few years ago we were all spoon-fed with labour. In a moment the whole of the mechanism for compulsory labour supply was withdrawn by the native authorities under sanction from Government. Quite suddenly the whole employing community was called upon to offer "inducements" to labourers and to spoon-feed them almost, to volunteer for service. The necessity for the offer by a superior race of "inducements" to the lowest elements of a lower race was strongly resented for a time. Another factor however was superimposed in Uganda to complicate the labour problem still further and this was the almost universal employment of native labour on cotton growing. Labour shortage then became acute and the present Labour organization was brought into existence and happily was speedily able to provide a *modus operandi*.



5. I submit that it should be conceded that one of the more important functions of the Labour Department lies in tactfully leading the employing public to carry out reforms in conditions and thus to appreciate why it is that natives cannot be expected to seek employment under existing conditions and what it is absolutely necessary to do to encourage natives to volunteer for employment as unskilled labourers.

6. Progress has been hampered by the unfortunate introduction of "anti-native" and "pro-native" considerations into a problem that is partly an economic one, largely a medico-hygienic one and with which such considerations properly have no concern. If they could be sternly ruled out the solution of medical difficulties would be greatly expedited. So often some reform is proposed which will undoubtedly increase out-put, at a cost which is clearly economically practicable and sound and eminently desirable, but it is opposed and ruled out from a fear of "pampering the labour." This cry has become an obsession with a section of the public and undoubtedly materially interferes with and retards progress in labour questions.

7. *Sources of Local Labour Supply.*—It does not appear to be generally appreciated that the Baganda are unlikely to devote themselves to unskilled labour if they can find better occupation. It is recognised that in most countries unskilled labour is the least sought-after occupation and everyone strives for other and better employment. Here under the compulsory labour arrangements "Kasanvu," unskilled labour had a bad name and came to be looked upon as degrading and to-day only the poorest will adopt labour as an occupation. Moreover it is not fully understood that in no circumstances are the local inhabitants likely to volunteer as unskilled labourers at the wages that used to be paid to the pressed man. This is in no way their expressed view. I do not believe that they hold communally, or are able to hold, thought-out views on labour questions. They find more profitable occupation at every turn and corner. Employers of labour must not over-look the fact that the cotton-fields are their greatest competitor and they will have to pay more. The attitude of the Baganda, the Chiefs and the Missionaries have been much misunderstood and misrepresented on this point. All are suffering and crying out just as is the European commercial employer at the moment about the dearth of labour. It does not seem to have occurred to those who constantly refer to the innate laziness of the local inhabitants that this very fact together with the climatic conditions and the ease of tropical conditions may *de facto* render manual labour a costlier commodity locally than in countries where these adverse conditions do not obtain; from purely general reasoning it appears that the cost of a free labour supply here might fairly be estimated at double the price that it was customary to pay for compulsory labour. It will thus be seen that if a considerable section of the employing public thinks it right for reasons that seem good to them to impede the tendency to a higher wage, the most probable effect will be a still further curtailment of the present scanty flow of volunteer labour.

8. *Specific Matters requiring Adjustment.*—In all countries where labour is at a premium, a number of attractions or inducements are prepared in the matter of canteens, etc., and other privileges. However as these are economic and not medical considerations I would leave them to the consideration of those whom they actively concern. I mention that I recently met a capitalist from the Federated Malay Straits who contemplated proposed enterprise and commented with surprise on the entire absence of such inducements in a country in which labour difficulties existed.

9. My representations refer chiefly to the following:—

- (a) Dietary and wages.
- (b) Cooking arrangements, fuel, etc.
- (c) Dwellings, water supply and sanitary arrangements.
- (d) Medical services.

10. *Dietary and Wages.*—I should like to consider and comment on these points together because the consideration of the wage is bound up with the all important question of dietary. Most employers will state that they would be willing to pay a higher wage for a higher out-put and this brings up at once the question of dietary. The proposition that you cannot get more energy out of a machine than you put into it is undeniable. It is said that no more than x/- a month can be paid to native labour because their out-put does not warrant it. On enquiry it will be found that the dietary of many African labourers is much poorer in energy value than that afforded to African prisoners on hard labour. It is here that the vicious circle is encountered and the inevitable and eternal controversy begins. The labourers do not perform a proper task, apart from any innate lack of desire to do so, and their natural disinclination under



present conditions is not disputed, because they have not the energy to do so. We cannot afford to put them on a higher energy producing diet because their out-put does not warrant the cost of that diet. Briefly stated, the paradox is this—they cannot out-put, primarily because they have not the energy; they cannot be granted the energy because their out-put is too low. Thus an impasse clearly arises.

11. An attempt has been made by the Labour Department under medical advice to break into this circle and give the labour the same diet as is afforded to prisoners. The labour dietary proposed was sent to the medical advisers of the Colonial Office and encountered the severest criticism on the ground of its inadequacy in fresh food factors and its low proteid content. Nevertheless it was a great step forward and without prejudice to further improvements that may be effected. This diet is now being issued and the public have at length accepted the necessity for it.

12. More recent research has however shown that the factor on which we rely for proteid, namely maize, is of little value for this purpose and we are thus aware that the home criticism is even more than justified. It is recognised now not only by the medical authorities but also by many contractors that there is only one means of supplying in a single step fresh food factors and proteid, and this is by a meat issue.

13. As such an issue is seriously objected to by many of the general employer public, contractors often arrange for cheap supplies of oxen to labour camps so that the labourers may themselves buy meat at low rates, and thus it cannot be said Mr. A. or B. is “pampering his labour” or “upsetting the labour market.” The contractor of course is guided entirely by out-put and he knows that with a meat diet he gets the required out-put but not otherwise. Further evidence of the proteid deficiency in our labour dietary is the cry on all hands for increased *bean* ration: an important food factor of the bean is proteid.

14. A senior officer of the Kenya Medical Service advances the view that most natives living under natural conditions in the reserves suffer from proteid starvation and thinks that they are thus prone to disease on recruitment, especially enteritis. He therefore advocates issues of meat on first arrival at a depôt on recruitment. The first month of service is unquestionably the period of greatest morbidity.

15. Objections to issuing money in lieu of proper ration properly cooked seem too obvious to merit special comment but this point must be referred to because there is a tendency amongst employers to rid themselves of the trouble of rationing and cooking arrangements by giving an additional few shillings in lieu of rations with disastrous results. The responsibility for one of the cardinal factors for health is thus placed upon the one person least fitted to bear it, the ignorant labourer.

16. *Cooking Facilities.*—I understand that in South Africa where imported labour costs are much higher than is dreamed of here, raw labourers are not usually allowed to cook for themselves. It has been found economically unsound to allow them to do so. Here it is not rare to find an employer complaining of the rising cost of labour and at the same time on enquiry it will be found that a considerable proportion of his labourers are sick and thus the reputed cost may therefore have to be multiplied by two in order to arrive at the actual cost. It is the reputed cost however that seems to cause concern to employers and not the actual cost. Proper allowance for sick pay never seems to be made in costing calculations. Enquiry reveals a disregard of elementary hygiene in camp arrangements, little or no fuel, labourers eating half-raw maize, etc. Every medical inspector of labour camps is familiar with the instances of disregard of rudimentary precautions that are so often found. I believe that the native material recruited from Portuguese East Africa for the South is little better than the average native material recruited here. Perhaps industries in the South can better support the cost of the up-keep of the more expensive cooking arrangements than industries here (or is it perhaps that we prefer to pay for the sickness) but until the vast economic importance of proper feeding and cooking arrangements for the crassly ignorant labourers is more fully and intelligently appreciated by employers and their active interest and co-operation in them is secured there can be little hope for the successful remedy of present difficulties. Apart from the financial loss to the employer that preventible disease involves, a high morbidity and mortality rate must be a deadly weapon against recruitment and labour supply. It operates not only against the supply of imported labour but also against the all-important supply of local labour because the local natives will shun an occupation known to be associated with morbidity and death.

17. *Dwellings, Water Supply and General Sanitation.*—Every one is familiar with the collection of grass or mud huts in camps in which native labourers are



usually accommodated and knowledge too is general of the dangers to health and life contingent upon and associated with the taking of people from natural conditions and herding them in camps, be they civil or military. In the case of native labourers we have usually to deal with the most ignorant and backward of the tribes hence all sanitary and hygienic arrangements must be absolutely fool-proof if they are to be applied continuously and successfully. It follows from these premises that the usual conditions of labour camps are such as are likely to produce disease and though much can be done and is done to mitigate and alleviate insanitary conditions we are clearly fighting a losing battle. The slightest relaxation of a most toilsome and troublesome régime has only to occur and disease breaks out. A few instances will suffice to explain. Most camps are encircled with a reed fence with the object of affording the labourers less effort in using the proper latrines than the camp perimeter. In the course of a few weeks the reeds rot and the fence falls; it requires constant repair and supervision. Who has the time for such details? Again perhaps there is a good water supply and a foul water supply near the camp, the latter being the nearer. Labourers return tired and thirsty and inevitably use the bad water.

18. Just as the old grass bandas which originally represented our hospitals and prisons have with the march of time disappeared and been replaced by properly built burnt-brick wards and prisons in main stations, so these temporary labour camps will have to disappear in our townships if sanitation is to be properly carried out, at least in our big centres of labour activity such as Kampala and Jinja. The building of proper permanent labour locations in main stations is I believe the only real solution to satisfactory housing and sanitation of labour. Together with permanent dwellings will come the introduction of proper tank water supply and great improvement of general sanitation. It is in the present life in labour camps that the chief danger lies which calls for so many special sanitation measures and precautions.

19. The keeping of a camp population healthy is recognized as calling for the highest sanitary skill and effort in the world. It is the greatest problem in any war. It seems regrettable that the already difficult problem of labour supply has inevitably to be complicated by constantly being called upon to carry this burden also.

20. *Medical Services.*—There is no inherent difficulty in Uganda in the treatment of routine sickness amongst labourers subject to the maintenance of native medical attendants at each large camp who can inform a Medical Officer in the event of outbreak of epidemic disease or of the occurrence of undue sickness from any cause. The main call from the Medical Department is for its advice in the prevention of disease and for the supervision of the work of native medical staff by Medical Officers. This entails the regular touring and inspection of labour camps with a view to strict enforcement of sanitary regulations; this again entails a certain excess of medical officer establishment over and above those required for the maintenance of all hospitals and stations, also provision for special motor transport allowances to permit these visits to be made. It would unquestionably be of advantage to remove cases of dysentery or severe enteritis at once from labour camps to a treatment centre and this again entails the consideration of special motor ambulance facilities at certain places or at times when epidemics break out.

21. As it appears that the highest morbidity and mortality occurs in imported labour a consideration of the adoption of the methods in force in the Sudan of quarantining newly arrived imported labour in a camp in which disinfection, de-lousing, dis-infestation from human parasites is carried out, might be entertained. In the Gezira, irrigation works on a large scale have entailed the importation of 15,000 labourers from Egypt on a six months' contract and a sum of £7,000 has been expended by Government on the erection of buildings for quarantine work. It is of interest to compare the expenditure on one minor part of a labour organization in a neighbouring dependency.

22. *Returns.*—From the point of view of enlightenment of the general public I believe it could be very helpful if the sickness rate and death rate amongst labourers, Government and non-Government, could be properly estimated by means of returns, and made known. One reads in some reports that employers, with the best intentions, pay off at once any labourer falling sick. This means that a great deal of morbidity and possibly of mortality escapes record. I believe that if the true mortality and morbidity rates amongst labour were available and their cost estimated and published (most sick labour in Uganda is paid in full) it would be found by comparison that the costs of permanent dwellings, increased medical supervision and better proteid dietary would be relatively slight, and the information obtained would be a powerful weapon for the



education of the public. The amount of the interest on capital expended on improvement of labour conditions would I believe be found to be very much less than the present unproductive sum set aside for payment of sick labour.

23. *Imported Labour*.—From a public point of view it is desirable as far as possible to employ local labour rather than imported labour. The death rate and incidence of sickness is always higher and the demand on medical services far greater in the case of imported labour than in labour drawn from local populations.

One of the values of the procedure of importing labour is the forcing upon the employer the necessity for improving labour conditions.

When labour is imported the employer does not appear to question the necessity for providing for sick pay, medical attendance, dwellings, rations, transport and travelling expenses, and over-head charges for recruiting costs.

It thus appears that in the abstract that one of the purposes of importation of labour is the raising of the standard of conditions and costs of labour in the scene of importation in order that the flow of local labour supplies may be stimulated. It does appear to the onlooker to be a most cumbrous and devious process.

It cannot be too strongly insisted upon that the organization for imported labour, for medical examination prior to travelling, medical attendance on route, dietary and transport arrangements, should be applied just as carefully to the return home journey as in the case of the outward journey and that outbreaks of disease amongst returning labour are a danger to the health not only of the labourers themselves but of the local populations on route.

24. There is of course no single step or effort that will solve the many-sided difficulties of the labour problem, though many of these difficulties are clearly readily capable of remedy. Time will be a large factor and the various opposing forces will eventually resolve themselves into a resultant force, and the supply of labour will flow. While it cannot be questioned that to-day many native labourers are not worth their pay, it does appear that we have to strive intelligently to make them worth their pay. A variety of paradoxes have to be resolved. It seems that the task of those who are engaged in the various processes of solution will be greatly lightened when the local cost of labour rises. It is always difficult to obtain good conditions for an article of low market value. As it is cotton that pays for ginneries, gunny-bags, and even for railways and rolling-stock, so African labour will in time enforce the arrangement of the conditions necessary for its production and maintenance.

25. *Conclusion*.—Summarised my recommendations are:—

(a) Insistence upon close collaboration between the Labour with Medical Departments. Laying down as a primary function of the Labour Department, *the education of the employing public in necessary reforms*.

(b) With a view to the speeding up of this education process I favour limited experiment of extension of labour exchanges under the control of the Labour Department to recruitment for private enterprise, subject to private employers contracting to observe such conditions as the Labour Department may impose.

(c) Complete assumption of responsibility for adequate dietary and cooking arrangements by employers.

(d) Improving the proteid content of the dietary by the addition of meat either added to the authorized ration or arranged for by assisted purchases.

(e) Building of permanent labour locations at main stations.

(f) Allocation of additional Medical Officers, additional ambulances and provision of additional motor transport allowances for Medical Officers engaged on labour duty, when specially recommended by the Director of Medical and Sanitary Services.

(g) Consideration of the establishment of a quarantine station for newly imported labour.

(h) Encouragement in every possible way of the employment of local labour rather than imported labour, by improving conditions, especially pay, dietary, housing, water and fuel supplies.

(i) The grant of funds for capital expenditure on the improvement of labour conditions on the lines indicated with a view to ensuring a permanent supply of volunteer labour.

ENTEBBE

15TH OCTOBER, 1925.

G. J. KEANE, MAJOR,

*Deputy Director of Medical (Native) Service.*

## APPENDIX No. IV.

**Annual Report, Mulago, 1925.**

I. *Mulago Units*.—The following is a list of units which came under the Medical charge of the Mulago staff and visiting staff during 1925:—

- |  |   |
|--|---|
| <p>(a) Mulago Hospital, 220 to 306 beds.<br/>Out-patient Department.<br/>Eye Clinic.<br/>Maternity and Child Welfare Clinic.<br/>Native Medical Staff, Training Department.<br/>Registrar's Office, Laboratory.</p> <p>(b) Mubende Hospital, 20 beds.<br/>Out-patient Department.<br/>Sub-Dispensaries (building), 4.</p> <p>(c) Bombo Hospital, 30 beds (8 months only).<br/>Out-patient Department.<br/>Venereal Clinic.<br/>Bowa Sub-Dispensary.<br/>Kalagala Sub-Dispensary.</p> <p>(d) Mulago Sub-Dispensaries.<br/>Mityana.<br/>Mukono.<br/>Kasangati.<br/>Wakiso.<br/>Mbale.<br/>Nakifuma (building).</p> | <p>(e) Police and Prisons.<br/>Police Lines, Kampala.<br/>Gaol, Kampala.<br/>Warders' Lines, Kampala.<br/>Gaol, Luzira.<br/>Warders' Lines, Luzira.<br/>Mengo Gaol (Native Government).</p> <p>(f) Labour Camps.<br/>Maximum of 15 camps, housing on an average, 450 porters.</p> <p>(g) Miscellaneous.<br/>Weekly inspection of Rubaga Mission Hospital.<br/>Assistance to Nsambya Hospital (6 months).<br/>Assistance to European and Asiatic Hospitals.<br/>Medico-Legal Work, Kampala Courts.<br/>Medical Aid to the Counties of Bugerere and Buruli.</p> |
|--|---|

II. *Staff*.—

## A. EUROPEAN—

- 1 Senior Medical Officer.
- 5 Medical Officers.
- 1 Laboratory Assistant.
- 1 Superintendent.
- 1 Assistant Superintendent.
- 1 Matron.
- 4 Nursing Sisters.

## B. ASIATIC—

- 1 Sub-Assistant Surgeon, Mubende.
- 1 Sub-Assistant Surgeon, Bombo.
- 1 Compounder, Mulago, 2 months only.
- 1 Clerk, Mulago, 2 months only.

## C. NATIVE—

- |                     |     |     |
|---------------------|-----|-----|
| 1 Medical.          |     |     |
| Grade I             | ... | 2   |
| Grade II            | ... | 6   |
| Learners            | ... | 112 |
| Female              | ... | 20  |
| 2 Clerical          | ... | 14  |
| 3 Hospital Services | ... | 20  |
| 3 Sanitary Services | ... | 40  |
| 5 Labourers         | ... | 100 |

III. *Buildings—Mulago only*.—

- |  |   |     |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
|--|---|-----|---|----------------|-----|---|----------------|-----|---|--------------|-----|---|---------------------------|-----|---|------------|-----|---|------------|-----|---|-------|-----|---|------------------------|-----|---|-------------------|-----|---|----------|-----|---|--------------|-----|---|--------------|-----|---|-------------------|-----|---|----------------------|-----|---|------------------|-----|---|------------------|-----|---|-----------------|-----|---|---|---------------------------|-----|---|-----------------|-----|---|---------------------|-----|---|-------------------------|-----|---|----------------------|-----|---|--------------------|-----|---|-------------------|-----|---|---|-----|---|----------------------|-----|---|--------------|-----|---|-------------|-----|---|
| <p>(a) Buildings finished before 1925.</p> <table border="0"> <tr><td>Clerical, Administrative and Laboratory Block</td><td>...</td><td>1</td></tr> <tr><td>Wards, 52 beds</td><td>...</td><td>3</td></tr> <tr><td>Wards, 32 beds</td><td>...</td><td>1</td></tr> <tr><td>Ward Cubicle</td><td>...</td><td>1</td></tr> <tr><td>Kitchen and Laundry Block</td><td>...</td><td>1</td></tr> <tr><td>Dispensary</td><td>...</td><td>1</td></tr> <tr><td>Pack Store</td><td>...</td><td>1</td></tr> <tr><td>Store</td><td>...</td><td>1</td></tr> <tr><td>Out-patient Department</td><td>...</td><td>1</td></tr> <tr><td>Operating Theatre</td><td>...</td><td>1</td></tr> <tr><td>Mortuary</td><td>...</td><td>1</td></tr> <tr><td>Petrol Store</td><td>...</td><td>1</td></tr> <tr><td>Incinerators</td><td>...</td><td>2</td></tr> <tr><td>Block of Latrines</td><td>...</td><td>1</td></tr> <tr><td>Tank, 10,000 gallons</td><td>...</td><td>1</td></tr> <tr><td>2nd class Houses</td><td>...</td><td>3</td></tr> <tr><td>3rd class Houses</td><td>...</td><td>3</td></tr> <tr><td>5th class House</td><td>...</td><td>1</td></tr> </table> | Clerical, Administrative and Laboratory Block | ... | 1 | Wards, 52 beds | ... | 3 | Wards, 32 beds | ... | 1 | Ward Cubicle | ... | 1 | Kitchen and Laundry Block | ... | 1 | Dispensary | ... | 1 | Pack Store | ... | 1 | Store | ... | 1 | Out-patient Department | ... | 1 | Operating Theatre | ... | 1 | Mortuary | ... | 1 | Petrol Store | ... | 1 | Incinerators | ... | 2 | Block of Latrines | ... | 1 | Tank, 10,000 gallons | ... | 1 | 2nd class Houses | ... | 3 | 3rd class Houses | ... | 3 | 5th class House | ... | 1 | <p>(b) Buildings completed in 1925.</p> <table border="0"> <tr><td>Nursing Sisters' Quarters</td><td>...</td><td>1</td></tr> <tr><td>Ward, 26-bedded</td><td>...</td><td>1</td></tr> <tr><td>Garage for six cars</td><td>...</td><td>1</td></tr> <tr><td>Native Nurses' Quarters</td><td>...</td><td>1</td></tr> <tr><td>Tank, 30,000 gallons</td><td>...</td><td>1</td></tr> <tr><td>Convalescent Lines</td><td>...</td><td>1</td></tr> <tr><td>Porters' Location</td><td>...</td><td>1</td></tr> <tr><td>Native Attendants' Quarters, 16 Cubicle</td><td>...</td><td>1</td></tr> </table> <p>(c) Buildings started but not completed in 1925.</p> <table border="0"> <tr><td>Tank, 30,000 gallons</td><td>...</td><td>1</td></tr> <tr><td>Animal House</td><td>...</td><td>1</td></tr> <tr><td>Incinerator</td><td>...</td><td>1</td></tr> </table> | Nursing Sisters' Quarters | ... | 1 | Ward, 26-bedded | ... | 1 | Garage for six cars | ... | 1 | Native Nurses' Quarters | ... | 1 | Tank, 30,000 gallons | ... | 1 | Convalescent Lines | ... | 1 | Porters' Location | ... | 1 | Native Attendants' Quarters, 16 Cubicle | ... | 1 | Tank, 30,000 gallons | ... | 1 | Animal House | ... | 1 | Incinerator | ... | 1 |
| Clerical, Administrative and Laboratory Block  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Wards, 52 beds   | ...   | 3   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Wards, 32 beds   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Ward Cubicle   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Kitchen and Laundry Block  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Dispensary   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Pack Store   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Store  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Out-patient Department   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Operating Theatre  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Mortuary   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Petrol Store   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Incinerators   | ...   | 2   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Block of Latrines  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Tank, 10,000 gallons   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| 2nd class Houses   | ...   | 3   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| 3rd class Houses   | ...   | 3   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| 5th class House  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Nursing Sisters' Quarters  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Ward, 26-bedded  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Garage for six cars  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Native Nurses' Quarters  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Tank, 30,000 gallons   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Convalescent Lines   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Porters' Location  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Native Attendants' Quarters, 16 Cubicle  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Tank, 30,000 gallons   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Animal House   | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |
| Incinerator  | ...   | 1   |   |                |     |   |                |     |   |              |     |   |                           |     |   |            |     |   |            |     |   |       |     |   |                        |     |   |                   |     |   |          |     |   |              |     |   |              |     |   |                   |     |   |                      |     |   |                  |     |   |                  |     |   |                 |     |   |   |                           |     |   |                 |     |   |                     |     |   |                         |     |   |                      |     |   |                    |     |   |                   |     |   |   |     |   |                      |     |   |              |     |   |             |     |   |



IV. *Mulago Hospital*:—

## A. HOSPITAL SERVICE.

1. *Housekeeping*.—Under the charge of a Sister. This includes the following duties:—

(a). Making orderlies' coats, nurses' dresses, caps and belts, patients' bed gowns, bed coverlets, pneumonia jackets, curtain screens, table cloths, theatre gowns, aprons, etc. Over 800 articles were made during the year. One tailor and one seamstress are employed.

(b). Mending and repairs of bed linen, nurses' uniforms, orderlies' uniforms, patients' garments.

(c). Laundry. Collection and counting of soiled linen from wards and return of clean linen. 93,588 articles washed during the year. 1,800 lbs. soap were used. A head dhobi and seven assistants are employed.

(d). Kitchen. Arrangement of dietaries and supervision of cooking. 755,251 lbs. of green food were cooked during the year, in addition to special dietaries. A head cook and five assistants are employed.

(e). Distribution of all wards stores, dressing and equipment.

(f). Stencilling all ward equipment, linen, etc.

(g). Pack Store. Bathing and shaving of patients before admission. Issue of patients' uniforms. Receiving and dealing with personal effects of the deceased and issue of burial cloths. Two clerks and a helper are employed.

(h). Preparation of daily in-patients returns.

(i). Maintenance of cleanliness of all hospital buildings other than wards.

(j). Maintenance and checking of ward inventories.

2. *Hospital Grounds*.—About 84 acres of land comprise the hospital area. About 100 labourers were maintained on an average throughout the year. At least one-third of the area remains to be reclaimed.

3. *Water*.—Reliance has to be placed on two tanks of a total capacity of 40,000 gallons, collected from the ward roofs. In the dry seasons water has to be carried by porters from the surrounding swamps. The total consumption for all purposes including supplies to 200 patients and 100 attendants, is 700 gallons a day or a little over two gallons per head per day. The whole water arrangements are most unsatisfactory.

4. *Light*.—Paraffin oil lamps are the only source available. The light given is ineffective and costly.

5. *Heating*.—For all purposes, wood is the only material available, except in wards where oil stoves are used. Consumption of paraffin 1,760 gallons, of wood about 800 cubic yards per annum.

6. *Conservancy*.—Bucket system throughout. As much as possible of the material is incinerated. An average number of 36 sweepers is maintained.

7. *Cemetery*.—A small temporary cemetery is maintained. A gang of four special labourers is employed for the burial of dead.

8. *Registrar's Office*.—Under the charge of a Medical Officer the work is carried out by the Assistant Superintendent. Two native clerks are employed. The work includes the maintenance of personal papers relating to native staff, the collection of hospital returns received from out units, and the preparation of Mulago Hospital returns, maintenance of in-patient and death registers, the compilation of statistics relating to all the medical activities of the various units, the supervision of posting all native attendants to various duties and units, the recruitment of learners, disciplinary action amongst native staff.

9. *The Superintendent's Office*.—Under the charge of the Superintendent Responsibility of all the financial side of the hospital and its subsidiary units, maintenance

of all stores and store ledger. Control of labour, control of food, fuel buying and distribution, control of car services, and all other non-medical duties and services.

10. *Car Services*.—The cars are used for the transport of patients to and from Mulago, to take medical officers on their visits to the various sub-units, for transporting native medical staff on transfer, and for the transport of medical stores.

The following cars were in use during the year:—

Car.	Months in use.	Mileage.
Overland Box No. 1 ... ..	12 ...	13,275
Overland Box No. 2 ... ..	2 ...	879
Ford hired ... ..	4 ...	4,089
Dr. Webb's car ... ..	6 ...	2,717
Dr. Mitchell's car ... ..	6 ...	2,934
Dr. Boase's car ... ..	10 ..	1,720
TOTAL MILEAGE		<u>25,614</u>

#### B. EDUCATIONAL.

No systematic courses of lectures for native medical attendants were attempted during the year. Practical tuition in wards, theatre, dispensary, laboratory and the out-patient department was given.

The following shows the number of recruitments, etc., during the year:—

	Male.	Female.	Total.
Recruited during the year ... ..	132 ...	18 ...	150
Posted to other units and stations ... ..	76 ...	5 ...	81
Dismissed ... ..	19 ...	9 ...	28
Resigned ... ..	26 ...	10 ...	36
Working with Mulago Units at end of the year ...	113 ...	16 ...	129

#### C. MEDICAL AND SURGICAL WORK.

1. *Out-patients*. 12,739 new cases attended during the year. Of these 9,042 were men and 3,697 were women and children.

2. *In-patients*. 3,021 men and 926 women were admitted to the wards during the year, total 3,947.

Number of in-patients remaining from 1924 ... ..	154
Number admitted during the year 1925 ... ..	3,947
Total deaths during the year ... ..	437
Number of patients remaining at the end of 1925 ... ..	217
Average daily number of in-patients during the year ... ..	203·35
Total number of in-patient days treatment, 1925 ... ..	74,224

Dysentery accounted for 890 admissions during the year.

#### 3. *Surgical Operations*.

	Operations.	Died.
General operations ... ..	123 ...	11
For septic conditions ... ..	413 ...	15
Genito-Urinary ... ..	191 ...	3
Gynecological and obstetric ... ..	60 ...	10
Eye operations ... ..	54 ...	0
TOTAL	<u>841</u>	<u>39</u>

#### 4. *Dr. H. B. Owen's Report on the Eye Clinic for 1925.*

The clinic is opened on Wednesday mornings and operations are performed on Saturday mornings.

611 new cases presented themselves, the total attendances aggregating 2,085. Corresponding figures for 1924 were 619 and 2,053.



The following table shows the incidence of the different conditions observed. It must be remembered that following the primary conditions other structures frequently become secondarily involved. As a rule the primary condition only is tabulated, though when a secondary condition assumes great importance, it is shown on the table.

1. <i>Lids.</i>				8. <i>Iris and Ciliary body.</i> —			
Oedema of the lids	...	...	7	Iritis and cyclitis	...	...	38
Hordeolum	...	...	4	(grouped together because the two conditions frequently co-exist).			
Cellulitis of the lids	...	...	2	Traumatic paresis of iris	...	...	1
Trichiasis	...	...	4	9. <i>Choroid.</i>			
(Not associated with trachoma)				Rupture of choroid	...	...	1
Herpes of the lids	...	...	1	Choroiditis	...	...	2
Entropion	...	...	1	10. <i>Lens.</i> —			
2. <i>Lacrymal apparatus.</i> —				Cataract of senile	...	...	2
Dacryocystitis	...	...	1	Secondary	...	...	3
3. <i>Orbit.</i> —				Lamellar	...	...	1
Orbitalvellutitis	...	...	6	Congenital	...	...	1
Orbital tumor	...	...	2	Traumatic	...	...	1
4. <i>Muscles and motor nerves.</i> —				Dislocation of lens	...	...	1
Concomitant strabismus	...	...	1	11. <i>Retina.</i> —			
Paralysis of sixth nerve	...	...	1	Detachment of retina	...	...	1
Paralysis of third nerve	...	...	1	Embolism of central artery retina	...	...	1
Congenital absence of external rectus	...	...	1	Thrombosis of central vein of retina	...	...	1
5. <i>Conjunctiva.</i> —				12. <i>Vitreous.</i> —			
Conjunctivitis—Simple	...	...	141	Hæmorrhage into vitreous	...	...	1
do Phlyctenular	...	...	4	Retinitis proliferans	...	...	1
do Gonococcal	...	...	7	13. <i>Optic Nerve.</i> —			
do Tubercular	...	...	1	Optic neuritis	...	...	2
Trachoma	...	...	0	Primary optic atrophy	...	...	2
A. Suspicious stage	...	...	0	Secondary optic atrophy	...	...	4
B. Stage of undoubted trachomatous (inflammation of the conjunctiva.)	...	...	27	14. <i>All structures.</i> —			
C. Stage when cornea is involved with pannus formation	...	...	153	Panophthalmitis	...	...	3
D. Stage of fibrosis of the tarsi with entropion	...	...	48	15. <i>Glaucoma.</i> —			
Sarcoma of conjunctiva (with entropion)	...	...	48	Chronic primary	...	...	5
6. <i>Cornea.</i> —				Chronic secondary	...	...	3
Corneal ulcers	...	...	7	16. <i>Refractive errors</i>			
Corneal ulcers with hypopyon	...	...	1	...	...	...	22
Dendritic ulcer	...	...	1	17. <i>Unclassified.</i> —			
Nebulæ and leucomata resulting from ulcers	...	...	27	Hemianopsia due to vascular lesion of brain	...	...	1
Foreign bodies	...	...	4	Functional amblyopia	...	...	1
Abrasion	...	...	1	Contusion of eye ball	...	...	4
Pterygium	...	...	3	18. <i>Undiagnosed</i>			
7. <i>Sclera.</i> —				...	...	...	23
Episcleritis	...	...	1	19. <i>No disease discovered</i>			
Episcleral tumours benign	...	...	3	...	...	...	22
Gumma of sclera	...	...	3	20. <i>Diseases other than those of the eye</i>			
Perforating wound of eye ball	...	...	2	...	...	...	15
Contusions of eye ball	...	...	4				

*Remarks.*—The number of new cases and attendances are practically the same as last year. Trachoma, as before, is far the commonest disease. Unfortunately many patients apply for treatment when the disease is too far advanced to cure. It is responsible for great impairment of vision. No cases of Interstitial Keratitis or disseminated Choroiditis were observed. Their rarity is noteworthy in a country where congenital syphilis is common. Senile Cataract and Glaucoma are not frequently met with. Refractive errors are few, 22 cases only being observed, spectacles being prescribed in 12 cases. Time does not permit of a routine search for errors of refraction. Only those who complain that defective vision interferes with clerical work being so examined. 54 operations were performed, 26 of which were for the relief of Entropion due to Trachoma, 22 were major operations, the remainder minor. But for the fear, ignorance and apathy of the native population more operative work would be done. It may safely be said that the eye clinic is appreciated by the local population who supply the bulk of the patients, an indentured labourer being rarely seen.

5. *Maternity and Child Welfare*.—A clinic is held every Wednesday by one of the Nursing Sisters. 159 pregnant women who were suffering from active or latent syphilis received ante-natal treatment with the following results :—

1. Untraceable, transferred or died before labour	...	...	...	52
2. Not confined before the end of the year	...	...	...	41
3. Live births	...	...	...	54
Healthy babies alive at the end of the year	...	...	44	
Healthy babies died from other causes	...	...	4	
Congenital syphilitic babies alive at the end of the year	...	...	6	
4 Still births, etc.	...	...	...	12
Still births	...	...	4	
Miscarriages	...	...	8	
		TOTAL	...	159

Fifty-two of these women were confined in the wards at Mulago.

6. *Deaths*.—437 deaths occurred in wards during the year. The following list gives the main causes :—

Dysentery	...	206
Bacillary	...	176
Amœbic	...	17
Unclassified	...	13
Pneumonia	...	38
Lobar pneumonia	...	30
Broncho pneumonia	...	7
Septic, after cut throat	...	1
Syphilis	...	36
Toxæmia, septicæmia, pyæmia, etc.	...	26
Meningitis (including 6 cases of C.S.M.)	...	14
Malaria	...	14
Injuries	...	13
Phthisis	...	11
Helminthiasis	...	10
Ankylostomiasis	...	8
Ascaris lumbricoides	...	2
Other Causes	...	69
TOTAL	...	437

The following is a list of contributory causes :—

Dysentery in	...	18 cases
Syphilis in	...	10 cases
Pneumonia in	...	10 cases
Ankylostomiasis in	...	5 cases
Other helminthiasis in	...	3 cases

The deaths were distributed as follows :—

Men	...	366
Alien Government porters	...	168
Alien free labour	...	27
Convicts	...	24
Local Government employees	...	5
Local natives	...	142
Women and children	...	71
TOTAL	...	437

## 7. *Laboratory*.

Microscopic examination of blood films	...	2,224
Negative	...	1,418
Malaria, unclassified	...	325
Malaria, benign tertian	...	168
Malaria, sub-tertian	...	176
Malaria, quartan	...	5
Malaria, mixed infections	...	5
Spirillum	...	64
Microfilaria perstans	...	46
Differential total counts	...	17
Microscopic examination of fæces	...	1,422
No parasites seen	...	992
Ankylostome duodenalis	...	144
Entamœba histolytica	...	103
Ascaris lumbricoides	...	68
Tænia (unclassified)	...	39
Trichiuris trichiuria	...	33
Mixed helminths	...	21
Schistosoma mansoni	...	6
Strongyloides stercoralis	...	4
Lambia intestinalis	...	5
Balantidium coli	...	3
Oxyuris vermicularis	...	2
Unrecognized flagellates	...	2
Chemical and microscopical examinations of urine	...	167

Microscopical examinations of sputum	...	173
Tubercle bacillus	...	26
Negative	...	147
Urethral, vaginal smears, etc.	...	104
Gonococcus	...	68
Negative	...	36
Microscopical examination by dark ground illumination	...	167
Treponema pallidum	...	78
Negative	...	38
Microscopical examination of miscellaneous material	...	35
Total microscopic examinations	...	4,334
Serological tests of blood and cerebro spinal fluid	...	10,047
By both Wasserman and flocculation tests	...	5,366
By flocculation tests alone	...	4,681
Agglutination tests (Widal)	...	53
Negative	...	29
Positive to B. typhosus	...	13
Positive to B. paratyphosus A.	...	11
Vaccines prepared	...	
Detoxicated gonococcus vaccine	...	600 c.c.
Autogenous vaccines	...	7



## COMPARISON WITH PREVIOUS YEARS.

			1921		1922		1923		1924		1925
8.	<i>Sub-Dispensaries</i>	...	1	...	4	...	5	...	9	...	9
	New cases	...	3,418	...	5,246	...	8,327	...	39,663	...	44,926
	Attendances	...	36,011	...	113,158	...	241,091	...	406,759	...	415,791
	In-patients	...	415	...	1,174	...	2,585	...	3,604	...	3,947
	Aggregate in-patient days	...	11,961	...	43,841	...	49,452	...	82,375	...	74,224
	Operations	...	31	...	169	..	549	...	1,152	...	841
	Serum tests	...	2,508	...	3,159	...	5,763	...	11,569	...	10,047
	Other laboratory tests	...	384	..	62	...	1,518	...	3,436	...	4,387

V. *Sub-Dispensaries.—Outside Units:—*

(a). *Mubende District.*—For Mubende Hospital. A separate report is submitted for Mubende Hospital by the S.A.S. in charge.

Four Sub-Dispensaries were under erection in the district, one each at Kibale, in the County of Buyaga, Kisenyi and Madudu in the County of Bwekula, and Kakumiro in the County of Bugangadzi. Mityana, in the County of Singo, is dealt with under Mulago Sub-Dispensaries. No progress was made with the proposed Sub-Dispensary at Busanja in the County of Singo.

(b). *Bombo District.*—This district was under the charge of Mulago up to September, 1925, when it was taken over by Capt. Freeman. Capt. Freeman is submitting a report for Bombo Hospital. The Sub-Dispensary at Bowa and the Venereal Clinic at Bombo are dealt with under Mulago Dispensaries. The building of a new Sub-Dispensary at Kalagala in the County of Bulemezi was proceeded with.

(c). *Mulago Sub-Dispensaries.*—The following table shows the new cases and attendances from these units from which detailed returns are received. All these units with the exception of police lines and labour camps are run on the usual Sub-Dispensary lines, and are largely devoted to anti-venereal treatment.

Centre.				New Cases.	Re-attendances.	Total.
Mulago	...	...	...	12,739	60,704	73,443
Mukono	...	...	...	3,853	54,899	58,732
Mbale	...	...	...	1,728	45,023	46,751
Bowa	...	...	...	3,248	35,246	38,494
Kasangati	...	...	...	2,306	27,290	29,596
Wakiso	...	...	...	892	22,804	23,696
Mityana	...	...	...	1,413	21,419	22,832
Bombo venereal clinic and warders' lines	..			866	15,854	16,720
Kampala gaol and warders' lines	...	...		2,840	55,420	58,260
Luzira gaol	...	..	...	2,912	27,324	30,236
Police lines	...	...	...	1,202	4,808	6,010
Labour camps	...	...	...	10,947	45,000	55,947
TOTAL				44,926	415,791	460,717

Nakifuma Dispensary was completed towards the end of the year, and consideration was given to handing the buildings over to the Catholic Mission on whose land they stood, to be utilized by them as a dispensary under the charge of their doctor there. Mission activity has increased to such an extent during the time the dispensary was being built that there was no necessity for further Government enterprise there.

(d). *Other Activities.*—Owing to the fact that the Counties of Buruli and Bugerere are inaccessibly placed, and that their population is scanty and scattered, it has not been possible to render very effective medical aid to them. However, supplies of drugs and instructions for their use were issued to their chiefs concerned for distribution under their supervision.

A Medical Officer visited Rubaga Catholic Mission Hospital weekly, and advised on the care and treatment of cases.

The Native Government Gaol at Mengo was visited from time to time.

For the first six months of the year professional assistance was given to the Catholic Mission Hospital at Nsambya.

Medico Legal work, including post-mortem examinations and giving evidence in the courts was fairly considerable during the year.



Anæsthetists and assistance were put at the disposal of the European Hospital and Asiatic Hospital, Kampala, as required.

Over 2,000 examinations of Police recruits, porters, prisoners, etc., were made and certificates given as to physical fitness.

Small hospitals are maintained at the Government Gaols at Luzira and Kampala. All cases of any gravity are evacuated to Mulago daily. The number of admissions to gaol hospitals during the year was 443, and the great majority of these were transferred to Mulago on the same or the following day. Only one death occurred in gaol during the year, a case of suicide in an Asiatic.

VI. *Anti-Venereal Work*.—The table appended shows the Anti-Venereal work of the year for Mulago units, and is compiled from the anti-venereal clinics at Mulago, Kampala gaol, Luzira gaol, Bombo venereal clinic, Bowa, Mukono, Mbale, Wakiso, Mityana and Kasangati:—

Disease.	New Cases.	Re-attendances.	INJECTION OF				
			Mercury	Salvarsan	Bismuth	Iodine	Antimony.
Syphilis ...	7,853	163,875	69,601	10,186	336	9,215	8,800
Gonorrhœa ...	1,025	40,053					
Other Venereal Diseases*	1,078	40,640					

\*Other Venereal Diseases includes cases of soft sores, venereal observations, etc., in addition to 210 cases of yaws.

The ratio of attendances to new cases in the case of Gonorrhœa was about 40 to 1. The ratio of mercury injection to new cases in the case of Syphilis was about 9 to 1, and both of these figures must be regarded as satisfactory. The ratio of salvarsan injections to new cases of Syphilis was woefully low on the other hand, and far from satisfactory. With restricted supplies of this drug, the policy has been to give the drug more freely to early syphilitics who are young and otherwise healthy, *i.e.*, potential and desirable parents, rather than to the old, decrepit, or incurable to whom the drug is given but sparingly and on payment. Bismuth was used only on about 100 patients. The results in various forms of Syphilis appeared no better than results obtained from the use of mercury alone. In Yaws bismuth was more successful, but its effect was not comparable to the dramatic effect of salvarsan substitutes on this disease. But the main reason which militates against the use of bismuth as one of the principal weapons in an anti-venereal campaign, is the fact that it is administered intramuscularly. Natives will tolerate the intravenous administration of drugs over very long periods, but they will not submit to repeated intramuscular injections. Our experience of bismuth at Mulago is that the majority of patients ceased to attend after one injection and that almost all have ceased attending before a course is completed.

VII. *Helminthiasis*.—Ten deaths from this cause are recorded during the year, and in eight cases worm infection was noted on the death report as contributory cause. In eight cases Ankylostome Duodenalis was responsible, and Ascaris Lumbricoides in two. Of 1,422 stools examined 144 or 10·1% contained Ankylostome eggs. This figure underestimates the commonness of infection, as the greater number of stools examined were from Dysentery cases in alien natives, and in no case were any concentration methods used in looking for eggs. Infestation with Ankylostomes to a moderate degree does not appear to harm to any extent an otherwise healthy man. But a combination of Ankylostomiasis with another disease of usually low mortality produces a condition in which the mortality appears to be higher than the combined mortalities of the two diseases. This is particularly noticeable in post operative cases, and now no case is submitted to any major operation, apart from that of urgency, without first being examined for Ankylostome infection and receiving appropriate treatment if necessary.

VIII. *Dysentery*.—Dysentery maintained epidemic proportions almost throughout the year, with a marked increase in June which dropped in July and August, but rose again in the last four months of the year reaching a maximum in October. It was in the main restricted to alien porters housed in labour camps. Luzira gaol, situated near a labour camp, was, however, affected, and generally, cases were received from amongst local natives living in the vicinity of these camps. As there



were no facilities for the admission or treatment of a large number of these cases in the existing Isolation camp at Kampala, a 52-bedded ward at Mulago was put at their disposal. A number of cases of ordinary diseases in other wards contracted the disease in hospital, with some deaths.

IX. *Labour*.—The health conditions of alien labour housed in camps were bad. The number of camps for which Mulago was responsible was 15, housing on an average 4,194 porters mainly belonging to the Banyaruanda tribe recruited from Belgian Ruanda. During the year these porters accounted for 10,947 new cases with 55,947 re-attendances for various diseases. There were 1,281 cases of Dysentery amongst them with 222 deaths, 159 of which occurred in hospital and 63 in camps. The total deaths during the year from all causes were 285. The following table shows the various rates over 1,000 per annum for the four quarters and for the year as a whole :—

		<i>Sick Rate</i> ( <i>New cases</i> ).		<i>Dysentery Rate</i> ( <i>New cases</i> ).		<i>Dysentery</i> ( <i>Death rate</i> ).		<i>Death Rate</i> ( <i>all causes</i> ).
First Quarter	...	1,414	...	84	...	6	...	9
Second Quarter	...	2,576	...	275	...	45	...	52
Third Quarter	...	2,397	...	263	...	55	...	78
Last Quarter	...	3,759	...	488	...	79	...	98
Whole Year	...	<u>2,616</u>	...	<u>299</u>	...	<u>53</u>	...	<u>68</u>

In placing under camp conditions natives who have been used all their lives to village conditions, an increase in sickness of all description is to be expected. But that it should have reached and maintained the proportions it did, must be ascribed to the conditions under which they lived.

X. *Conclusion*.—In 1925 the amount of work achieved did not show an advance on 1924, but it was not to be expected that the rate of increase of the previous four years could be maintained. Improvements in internal administration and organisations were made, much was achieved in improving the grounds and environments of Mulago Hospital itself, and the valuable new buildings detailed in Section III. were added. Conditions in the wards were improved, but can never be made satisfactory whilst these two essentials to hospital cleanliness and efficiency—a free pipe water supply and adequate lighting—are lacking. No extension of work in the districts is to be recorded, but the figures of 1924 were maintained. Though it is disappointing to be unable to record any advance over the previous year in the amount of work undertaken and accomplished, a period of rest from extension has the one advantage of allowing time to consolidate advances already made.

W. L. WEBB,  
*Senior Medical Officer, Mulago.*

## APPENDIX No. V.

### Report by the Medical Officer in charge Uganda Railway Extension for 1925.

#### EUROPEAN OFFICIALS.

The number of cases treated during the year was 86 with no deaths. The principal cause of sickness was Malaria of which there were 56 cases. The number of off-duty days was 344.

On December 31st, 1925, there were 32 officials, including wives, resident along the construction.

#### ASIATIC OFFICIALS.

Of 30 cases treated 21 were due to Malaria. There were no deaths. Off-duty days numbered 120. There were 12 Asiatic officials on Construction on December 31st.

It is worthy of note that no case of Blackwater Fever occurred amongst Railway officials during the year.

#### ASIATIC NON-OFFICIALS.

Under this heading are noted cases of sickness amongst carpenters and mechanics employed by the Railway. One hundred and seven cases were treated with 174 days off-duty and no deaths.

The principal causes of sickness were Malaria, 67 cases, and Interstitial Complaints, 12 cases. The number of Asiatics of this class employed on December 31st was 25.

#### NATIVES.

The total number, of natives recruited for work on Railway Construction during 1925 was 13,300, with an average of 4,100 employed throughout the year.

#### SICK RETURNS.

##### *In-patients.*

Remaining from 1924	...	Nil	Number of patients remaining end of	
Admitted during 1925	...	1,627	1925	... .. 78
Total deaths in hospital during			Average daily number of in-patients	67
the year	...	89	Total in-patient days treatment	... 24,207

##### *Out-patients.*

Total new cases treated	..	6,152	Deaths	...	...	2
Average daily attendances	...	97	Total days off-duty in camps	...	14,230	
Total attendances	...	35,498	Average off-duty in camps daily	...	39	

#### SUMMARY OF NATIVE SICK RETURNS FOR RAILWAY EXTENSION IN UGANDA DURING 1925.

	Per cent of labour.		Per cent of labour.
In hospital daily ...	1.63	Total average off-duty daily ...	2.58
Off-duty daily in camps ...	0.95	Attendances of out-patients daily ...	2.4

#### STAFF.

<i>European.</i> —Medical Officers (one part time)	...	...	...	2
<i>Asiatic.</i> —Sub-Assistant Surgeons	...	...	...	2
Compounder	...	...	...	1
<i>Native Medical Attendants.</i> —Male	...	...	...	45
Sweepers	...	...	...	12

#### IN-PATIENT ACCOMMODATION.

Mbulamuti Hospital	...	...	...	32	temporary beds.
Kaliro	...	...	...	72	do
Mpologoma	...	...	...	24	do

#### BUILDINGS.

*Mbulamuti.*—The grass wards and dispensary built at the beginning of construction have been replaced by smaller buildings of a more permanent type.

*Kaliro* was made the central hospital for the construction. Three temporary wards and a dispensary were completed in May. A small operating theatre was erected in October.

*Mpologoma.*—Two temporary wards and offices were erected at the beginning of 1925.

*Isolation huts* are attached to each hospital.

*Labour Camps.*—Each camp along the construction is supplied with a native medical attendant. They attended to approximately 90% of the out-patients throughout the year.

The number of camp dispensaries during 1925 ranged from 15 to 25.

The standard of camps provided for railway labour has shown a marked improvement throughout the year. At present they are exceptionally good and compare favourably with other labour camps in the Protectorate.

#### GENERAL.

The principal diseases during 1925 were as follows:—

Disease.	Number of cases.	Number of deaths.
Ulcers	1,947	Nil
Malaria	883	4
Bronchitis	664	Nil
Local injuries	420	1
Dysentery	347	47
Influenza	195	Nil
Pneumonia	112	19



Ulcers have been very prevalent. This is unavoidable owing to the nature of the work on which porters are employed. This is equally true of local injuries.

During 1925 there were two Influenza epidemics which gave rise to a large number of Pneumonia and Bronchitis cases.

Dysentery has been a constant source of anxiety throughout the year. The majority of gangs from the West Nile were infected on arrival. The Dysentery was bacillary in type. In treatment castor oil was found to be more satisfactory than salines. Fifty-one per cent of the total deaths for 1925 were caused by Dysentery.

Plague.—There were six cases with five deaths amongst railway porters towards the end of 1925. Six thousand one hundred and sixty-seven plague inoculations were given during the year.

Syphilis is practically absent amongst West Nile. The few cases which have occurred have been given a course of treatment before being repatriated.

Deaths amongst railway porters numbered 91—giving a death rate of 6·8 per 1,000 of those recruited. The causes of death were as follows:—

Dysentery	...	...	47	Enteritis	...	...	3
Pneumonia	...	...	20	Intestinal obstruction	...	...	2
Plague	...	...	5	Bronchitis	...	...	1
Malaria	...	...	4	Meningitis	...	...	1
Anæmia	...	...	4	Burns	..	...	1
Septicæmia	...	...	3				

The health of imported labour has been unsatisfactory compared to that of local labour.

On the Mpologoma section where local labour only is employed the percentage of sick is exceedingly low. On the Mbulamuti section most of the illness is amongst imported labour—chiefly West Nile.

Although approximately 40% of labour recruited for this section during 1925 were Basoga—they supplied only eight per cent of the total hospital admissions.

#### RECOMMENDATION.

As far as possible local labour only should be employed on railway construction.

**N. C. MACLEOD,**

*Medical Officer in charge Railway Extension, Uganda.*

#### APPENDIX No. VI.

#### **Report by the Senior Medical Officer in charge Sleeping Sickness for 1925.**

##### I. GENERAL SUMMARY OF WORK DONE.

At the end of 1924 acute sciatica put me *hors de combat* for the whole of January and necessitated sick leave in February.

A tour of the Sese Isles in company with the Officer-in-Charge occupied from March 21st to April 9th; the Buvuna group was not visited. Mr. C. B. Symes, Medical Entomologist to Kenya Colony, came for part of this tour to see how the measures for prevention of Sleeping Sickness were carried out, prior to taking up his duties in Kavirondo. At the commencement of April Dr. R. G. Griffin, took up his duties as Medical Officer, Victoria Nyanza Infected Area, and at once commenced a general tour of inspection. From April 21st to June 12th was occupied by a thorough tour of the Gulu District in company with the District Medical Officer who had been appointed in March. On the return journey much benefit was gained by discussion with Dr. C. Chesterman, who was visiting Uganda from Stanleyville, and on his advice a request was made to the Rockefeller Institute for a further supply of *Tryparsamide*.



A tour of the Western Province had been planned for June to July but was abandoned by order of the Honourable the Director of Medical and Sanitary Services, as there were matters under discussion which required my presence at Entebbe. From mid-July to mid-August was completely occupied by the compilation of a consecutive record of what has actually been done in Uganda since the first epidemic. Early in August Dr. Graham Louw took up his duties on appointment as Medical Officer, Madi. Towards the end of August I visited the West Nile Infected Area which I had not seen since 1921, and before returning to Entebbe toured the upper part of the Waki Valley in Bunyoro whose lower reaches are known to be dangerous.

I returned to Entebbe at the end of September, and had arranged to accompany Mr. Fiske for part of a tour of the Lake Area, but this was abandoned by him owing to the impossibility of retaining the only means of rapid transport available. On November 4th, I left Entebbe for a tour of Chua and a conference on the Uganda—Sudan border with officials from the Sudan on December 7th. After this I took local leave in the Sudan and returned to Entebbe in January.

## II. THE POSITION IN EACH INFECTED AREA.

(a) *The Victoria-Nyanza and The Victoria Nile-Jinja-Kakindu Area.*—No cases of Sleeping Sickness have been found except in the neighbourhood of Mjanji, which abuts on Kavirondo. Here the disease is endemic, but Dr. Griffin reports that “there is a subsidence in the rate of infection (for 1925) compared with that seen by me in 1922.” The importance of preventing infection from spreading to other parts of the Lake is fully realized, and a centre for treating cases has now been established within a few miles from Mjanji under the District Medical Officer, Budama, appointed in June.

It is possible that there is a more or less continuous belt of infection through the southern part of Budama District as far northwards as the Namatala branch of the Mpologoma swamp, but with the staff available it has been impossible to ascertain the exact extent and nature of the disease.

The District Medical Officer, Budama, writes that four deaths from Sleeping Sickness were reported in the neighbourhood of Mjanji and that three new cases have been proved since September, while twenty suspects were seen, one of whom had come from Kavirondo in Kenya Colony. Dr. R. G. Griffin, took up his appointment as Medical Officer for the Victoria-Nyanza Area in April and was posted to Jinja as his headquarters. He made a preliminary inspection of the Busoga coast and the Buvuma group of islands and in July inspected the Sese Isles and the coast between Bukakata and Entebbe. These tours further accentuated the fact that the supervision available has not been sufficient to prevent conditions which would appear compatible with the return of Sleeping Sickness, more particularly in the south-western part of Busoga.

Much work has since been done by the Administration and Dr. Griffin in ascertaining the precise distribution of the people who have invaded the infected area and in examining them. Dr. Griffin reports that “it will probably be found that well over 10,000 souls are using the area between Jinja and Namasagali and immediately to the east of Jinja, who water either at the Nile or at the Lake.” Many of these people, of course, use the regularly cleared watering places, and it is difficult to estimate the exact degree of contact between population and fly.

It is significant that fishermen and labourers from Kavirondo and Mjanji have come to Jinja, and although no infected persons have yet been found at Jinja it must be accepted that there has been intercommunication between Jinja and these places. On the other hand facts submitted by Dr. Griffin and Mr. Fiske suggest that *Glossina* may not be the only vector at Mjanji, where the distribution of cases points to the possibility of house infection. The attention of the League of Nations Sleeping Sickness Commission has been invited to this point for their consideration and investigation.

Detailed recommendations for dealing with the situation at Jinja are not yet possible as our knowledge is not yet complete.

I have availed myself of opportunities afforded at Entebbe to examine and tabulate all records of fishing permits issued since the middle of 1922, as it was thought the data would give information interesting at the present and possibly valuable for the future as showing, among other things, the large number of registered fishermen who have been in contact with *palpalis* for three years without contracting infection, except in the endemic area of Mjanji. Tables are submitted as an appendix to this report.



## TREATMENT.

Dr. Griffin reports that several cases seen in 1922 at Mjanji are alive and that "the bulk of the survivors are among those who received two to three injections of Salvarsan Substitute. These were cases that showed heavy infection on gland puncture in 1922 and leaves me with the opinion that Salvarsan Substitutes are of distinct value in the treatment of Trypanosomiasis. The rapid resolution that occurs in glands infected with Trypanosomes is very different from the gradual sclerosis seen in untreated cases."

(b). *The Mpologoma Area and The Busitema Area.*—I have not been able to visit these areas and little is known of the extent of infection.

(c). *The Siroko Valley Area.*—This has not been visited. So far as is known the *palpalis* here is still uninfected.

(d). *The Katwe Area.*—I have been unable to visit this area.

1. *The part in Toro.*—The District Medical Officer, Toro, visited Katwe early in 1926 and found no cases in the villages at Katwe and along the main road. One case, a girl, was reported by natives at Kasenyi on Lake George but was not seen by him. Seven cases, however, from the County of Busongora lying north of Lake Edward, were treated with *Tryparsamide* by Dr. Schofield at the Church Missionary Society's hospital at Fort Portal.

2. *The part in Ankole.*—The Officer-in-Charge Ankole District, reported in December that clearings have been well maintained and that no cases had been reported, while the herd of cattle in the permitted village at the mouth of the Kazinga Channel were in excellent condition.

3. *The part in Kigezi.*—The Officer-in-Charge Kigezi District, reported that all clearings have been properly maintained and had no suggestions to make for improved control. The District Medical Officer toured the infected area in September and October and examined all persons living in the exempt area: no cases were found among five hundred examinees.

(e) *The Bwamba Area.*—I have been unable to visit this area as plans made more than once had to be abandoned owing to pressure of other work. The District Medical Officer, Toro, visited Bwamba in September and wrote that "every one of the recently reported cases was known to have been removed from a fly area some three or four years ago, and it is evident that the tertiary symptoms are only just developing. About a dozen cases appear to have occurred at two villages outside the recognised Sleeping Sickness area." Five of these were diagnosed by microscope at Fort Portal and, together with one diagnosed clinically, were treated at the Mission Hospital at Fort Portal by Dr. Schofield with *Tryparsamide*. Dr. Schofield writes that "the Bwamba area provides a problem especially where it joins the Congo Belge. Native chiefs tell me that there are many people hiding there and that there are very many cases of the disease there." It is understood that the Belgian Government is moving their people away from the neighbourhood of the Semliki River, but a detailed survey of this area will be essential as soon as a Medical Officer becomes available for the purpose.

(f). *The Wasa River Area.*—This has not been visited during the year under review. The District Medical Officer, Toro, reported that a boy in employment near Fort Portal, who was brought to hospital, was found to have Sleeping Sickness. He apparently had formerly lived somewhere in the neighbourhood of the Wasa River area. He was treated with *Tryparsamide* in the Mission Hospital at Toro but very soon ran away.

(g). *The Buganda Lake Albert Area.*—This small uninhabited area has not been visited.

(h). *The Bunyoro Area.*—In May the District Medical Officer at Hoima reported a case of Sleeping Sickness from south of Hoima near the Kafu River. He was treated with *Tryparsamide* and apparently cured, so far as time allowed that to be said, and was allowed to go back to his home. Considerable interest was aroused in this case since there is no *palpalis* anywhere in the neighbourhood, although there are probably other species such as *pallidipes* and *morsitans* within reach. On enquiry, however, the man admitted having been into the infected Waki River area



where the hunting is good and the *palpalis* is known to be infected with Trypanosomes pathogenic to man. Further examination of the population in the neighbourhood of the man's home revealed no more cases.

I toured the upper Waki basin in September to ascertain whether the former inhabitants of Bugungu on the Lake Albert coast, now settled above the escarpment in Kitana, might similarly have become infected through visiting the Waki River. A total of 794 men, 973 women, 382 boys and 291 girls was examined, the number of tax-payers being 1,294. No cases of infection were found.

I have been unable to tour the re-occupied strip of the Bugungu coast. The report of a tour by a district officer showed that the total number of tax-payers is now 244, a considerable increase over last year. More people would return if the interior could be re-opened but this is not considered advisable as the Victoria Nile and all other rivers are densely fly-infested except at their mouths, the open coast being fly free. No fresh cases of Sleeping Sickness have been found by the inspectors: those reported in 1924 who had undoubtedly been infected when living near the Waki River prior to their return to Bugungu have died. Three other deaths from Sleeping Sickness, probably under the same circumstances, were reported from Bugungu, making a total of six deaths.

The District Officer also reported on the re-occupied areas of Kyso and Tonia. These have not proved the attraction to the fishing industry that was expected, the population being even smaller than in 1924 (tax-payers of Kyso three, against four in 1924, of Tonia, 25 against 28). No cases of Sleeping Sickness were reported from these people.

(l). *The Lango Area*.—This very small area around the entrance into the Nile of the River Toshi calls for no comment.

(m). *The Nile Area*.—

(i) *The part in the West Nile District*.—I toured this area in August and September, with the Senior Medical Officer, Arua.

The quarterly returns, which the Officer-in-Charge kindly supplied from information given by the chiefs, had consistently showed no deaths from Sleeping Sickness until July 31st when five deaths were reported. Enquiry on the spot showed that in some cases the disease might have been acquired in Gulu. I found the conditions generally more satisfactory than in 1922 and protective clearings were on the whole good, but it was impossible not to feel that cases of Sleeping Sickness were being concealed. There were examined 2,152 men, 2,423 women, 1,946 children, the tax-payers of those parts numbering 2,799. Six suspects were subsequently examined microscopically by the Senior Medical Officer at Arua who found Trypanosomes in five, in one case only on the third examination. The Senior Medical Officer reported that the type of infection seems a mild one and the mortality is probably low. Four of the cases were treated with three or four injections of *Tryparsamide* but all absconded: the other absconded after a single injection. As they were not apparently ill when diagnosed it could not be said they were greatly benefitted.

Dr. Graham Louw reported from Madi in October that a case of advanced Sleeping Sickness was brought in from Aringa in the Lugwari County of the West Nile District on the main road from West Madi, two camps from the boundary. This part of Lugwari has not been included in any Sleeping Sickness "Infected Area." In 1922 the District Medical Officer, Arua, reported a case from Aringa, a small boy who had never left the district. It is possible therefore that the northern main road from West Madi to Arua is infected and further investigation is required. I have not been able to investigate this road since I went along it in 1921 when I found no cases among men 6,859, women 6,481, children 7,407—a total of 20,747 people examined. But infection due to intercourse with Madi may have developed since then: it is, therefore, important to limit such intercourse as much as possible.

(ii). *The part in the Gulu District*.

(a) *The Acholi Area*.—The Officer-in-Charge, Gulu District, has kindly sent quarterly returns of deaths reported by the chiefs.



The figures for 1924 are given for comparison :—

	Quarters for 1924.				Quarters for 1925.			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
Deaths from S.S. ... ..	35	31	34	26	20	24	13	16
„ „ other diseases ... ..	138	127	157	238	247	243	307	328
Per cent proportion of deaths from S.S. to total	20·2	19·6	17·2	9·4	7·5	6·5	4·0	4·6

The total number of deaths from Sleeping Sickness in the Acholi area for 1925 was reported as 73, of which 80 per cent were from Keyo County. These people were removed at the end of 1924 from the dangerous old road along the Oiteno and Unyama valleys and were placed along the new road to Attiak which only crosses one small watercourse as it runs all the way along a watershed. There can be no doubt whatever that the people were badly infected at the time of their removal and that the number of deaths will continue to decline. The gradual decline since March, 1924, is a striking testimony to the value of the work that has been done by the Administration, in carrying out clearings and movements recommended by the Medical Department, and indeed often suggesting such movements and devising new roads.

Dr. Dennard was appointed District Medical Officer, Gulu, on March 10th: he toured Madi with me in May and took back those cases who consented to undergo treatment in Gulu Hospital. Unfortunately shortage of Medical Staff necessitated his transfer to another district before the end of the year, and there is now no District Medical Officer for Gulu. I toured the Acholi area in May, paying attention to the conditions under which people were living rather than endeavouring to discover cases of the disease, since there was a Medical Officer stationed in Gulu. The protective clearings on the main roads were found well kept up, but the neighbourhood of Gulu station itself required attention. The new road to Attiak was admirably planned. The outlook for the Acholi area is no longer gloomy and the prospects are better than they have been for many years.

(b) *The Madi Area.*—Similar returns to those for the Acholi area are given below :—

	Quarters for 1924.				Quarters for 1925.			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
Deaths from S.S. ... ..	9	13	14	36*	49	44	26	17
„ „ other diseases ... ..	133	172	183	181	186	197	176	160
Per cent proportion of deaths from S.S. to total	6·3	7·0	7·1	16·6	26·3	18·2	14·2	9·6

\* Erroneously given as 26 in 1924.

The distribution of the deaths from Sleeping Sickness in Madi as in the Acholi area, is worth considering. The figures are given in percentages of the total :—

	Quarters for 1924.				Quarters for 1925.			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
EAST MADI—								
Oyuwi ... ..	20·0	100·0	22·2	38·5	62·1	64·5	37·8	45·5
Pakelli and Palaro ... ..	40·0	0·0	44·4	33·0	21·6	20·8	31·5	54·6
All other places ... ..	40·0	0·0	33·3	27·5	16·2	14·6	31·5	0·0
WEST MADI—								
Moyo ... ..	0·0	0·0	20·0	5·5	41·5	30·0	70·0	66·8
All other places ... ..	100·0	100·0	80·0	94·3	58·1	70·0	30·0	33·4

During 1925 the deaths occurred mainly in East Madi at Oyuwi and Pakelli along the Northern border of the Boroli country which was evacuated in 1921-22. There is little doubt that trespassing on a large scale takes place, the people going in search of the butternuts which grow there particularly abundantly, and also for hunting. Removal of the people of Oyuwi further to the north has been recommended. The people of Pakelli and Palaro were so removed recently, and it is hoped that the incidence of Sleeping Sickness in these places is a result of former infection and that it will steadily diminish as they are now in a fly-free country; but it is very probable that they will continue to trespass. On a recent safari a party of 40 men, women and children from Oyuwi and Pakelli was brought up to the District Officer: they had been found trespassing in the forbidden area and no less than 11 of them showed glands suspiciously enlarged.



In order to stop this search for butternuts in dangerous areas I have suggested that large plantations be fostered in the neighbourhood of the headquarters of East Madi.

In West Madi there have been proportionately more deaths at Moyo than at any other place, and it seems probable that until the central river Ebikwa has been cleared the unfortunate pre-eminence of Moyo will continue. Other clearings in Moyo are on the whole good. It is difficult to explain the sudden rise in number of deaths from Sleeping Sickness in Madi from the third quarter of 1924. Deaths from all other causes are greater from September, 1924, to June, 1925 (as in the Acholi area) but not to a degree corresponding to those from Sleeping Sickness. Since the increase from Sleeping Sickness begins about a year after the previous hunting season a possible explanation may be found here.

The butternut harvest occurred in 1925 about May and it is probable that the trespassing previously alluded to, largely due to a threatened famine owing to shortage of rains, will cause an increased incidence of Sleeping Sickness. I toured the whole of Madi in May and found, with few exceptions, that the clearings of river crossings and watering places were quite satisfactory; indeed had never been so well kept. The population examined numbered 3,151 men, 3,145 women and 8,800 boys and girls (not counting babies in arms). Forty-three new cases were diagnosed by gland puncture and forty-nine other suspicious cases were found. As usual all these were in the early stages and able to attend at the camp. The congregation of all the people at each rest camp is the only method possible in the limited time at my disposal, so that advanced cases are very rarely seen.

The following table gives the comparison between three such examinations done under the same conditions by myself in 1921 (Sept.), 1924 (Jan. Feb), 1925 (May), only those cases are counted which showed Trypanosomes by gland puncture on the day when the people were called up:—

					Year.	No. of tax- payers.	No. of examinees.			Per cent of cases to examinees.		
							M.	W.	C.	M.	W.	C.
<i>East Madi.</i>					1921	* ...	...	...	...	...	...	...
Adropi ... ..					1924	183	127	108	75	0·8	1·8	0·0
					1925	317	290	248	105	0·33	0·8	0·0
Adzugopi ... ..					1921	274	308	240	432	0·0	0·83	0·46
					1924	292	217	77	96	0·0	0·0	0·0
					1925	291	234	198	169	0·0	0·0	0·0
Gweri ... ..					1921	87	80	104	146	1·2	0·0	0·68
					1924	225	153	0	0	0·0	—	—
					1925	274	183	137	117	0·0	0·0	0·0
Liri (with Adropi in 1921) ... ..					1921	364	334	345	453	0·0	0·0	0·0
					1924	267	163	110	53	1·2	0·0	0·0
					1925	106	84	90	61	0·0	1·2	0·0
Oyuwi ... ..					1921	273	224	230	358	1·8	1·3	1·1
					1924	272	176	107	81	0·6	2·8	3·7
					1925	230	190	197	231	2·6	2·6	0·43
Pakelli and Palaro ... ..					1921	566	501	559	873	1·6	1·2	1·5
					1924	497	327	339	184	1·2	0·6	0·6
					1925	526	347	307	108	1·7	1·9	0·92
Patchara ... ..					1921	133	119	92	111	0·0	1·1	0·9
					1924	62	33	20	10	0·0	0·0	0·0
					1925	130	128	75	17	0·8	0·0	0·0
Zaipi ... ..					1921	265	280	294	457	1·1	2·0	1·0
					1924	242	149	43	78	0·0	0·0	1·3
					1925	230	169	240	96	0·6	0·0	0·0
<i>West Madi.</i>					1921	674	763	754	1,613	1·16	0·26	0·62
Amua with Otze and Meturu ... ..					1924	481	418	492	679	0·24	0·0	0·0
					1925	542	474	502	406	0·0	0·39	0·0
Dufile ... ..					1921	217	239	297	549	0·0	0·41	0·36
					1924	251	221	203	150	0·0	0·0	0·0
					1925	331	233	250	109	0·0	0·0	0·0
Metuli ... ..					1921	453	483	552	1,206	0·62	0·36	0·91
					1924	388	347	309	316	0·57	0·0	0·95
					1925	482	310	557	362	0·0	0·84	0·0
Moyo ... ..					1921	699	688	871	1,651	1·0	0·69	1·3
					1924	766	633	566	540	0·15	0·53	0·0
					1925	759	593	624	784	0·17	0·48	0·0

\* Counted with Liri.



The majority of cases found in 1925 received an injection of *Tryparsamide* on the spot and Dr. Dennard took back to Gulu as many as would consent to go to the district hospital for further treatment. During the year 64 cases of Sleeping Sickness were admitted to Gulu Hospital of which 52 were treated with *Tryparsamide*.

Now that the services of a Medical Officer (Dr. Louw) are available in Madi therapeutic measures are possible and further reduction of incidence must be looked for from these means, since the protective clearings in most places are so satisfactory that little more can be expected from them in the way of reducing contact with fly. It would be an admirable thing if the natives could be taught the protective value of such a drug as *Tryparsamide*. If all members of a prospective hunting party could be injected before going into contact with fly the sterilization of the blood thus induced, which lasts for a considerable period, would prevent mechanical transmission from one person to another, or infection of the fly by the cyclical method. Similarly, organised parties might be allowed to go in search of butternuts provided every member had been injected and that they did not remain more than a week or so in the prohibited area. This however would require more supervision than the present Administrative staff is able to give.

Centres for treatment with *Tryparsamide* have been set up at Ajumani (headquarters of East Madi) and Moyo (headquarters of West Madi). A further supply of ten kilos of the drug has been received from the Rockefeller Institute through Dr. Louise Pearce to whom the Government of Uganda is greatly indebted. These treatment centres are within one day's journey of most of the villages, and patients who refuse to stay for the full course of treatment can be called up when required.

Dr. Louw reports from East Madi 81 new cases not previously diagnosed, though it was not stated in how many the diagnosis was clinched by microscopy. Twenty of these received a single injection of *Tryparsamide* and up to the end of the year ten had received two or more injections.

In November Dr. Louw visited the segregation camp at Kajo-Kaji in the Sudan (which I had visited in 1921) and received much kindness and valuable information from the Senior Medical Officer, Sleeping Sickness. In May, with the Officer-in-Charge of Gulu District, I met the Senior Medical Officer, Sleeping Sickness, and the District Commissioner of Opari district at Jokwot in the Sudan to arrange for a regular market to be held there. Jokwot is only a few hours from Moyo and it is thought that a properly supervised market for exchange of hoes and food will prevent much of the surreptitious journeying between the two countries across uncleared streams.

(iii). *The part in Chua District.*—A Medical Officer (Dr. Lumsden) was appointed to Chua District and arrived at Kitgum at the end of August; he at once commenced investigations along the Kitgum-Gulu road. I toured the district, apart from this area, with him in November. Three proved cases of Sleeping Sickness have been found and were treated with *Tryparsamide*, also one very doubtful case in whom Trypanosomes were not seen, who derived no benefit from the treatment. Two of the cases were from the Gulu road which was previously known to be infected; the third came from Pajimu which is situated a day's march north of Kitgum on the road to Palabek, and on a tributary of the fly-infested Pager River. No cases have been found among the sundry settlements along the northern borders of Chua.

During my tour a total of 4,260 men, 4,067 women and 3,708 children (not counting babies in arms) was examined with negative results, the tax-payers of those areas numbering 6,578. Many absentees were satisfactorily accounted for as being at work out of the district but some of the chiefs produced less than half of their men and very few women and children. The clearings in Chua were found in excellent condition and adequately protecting roads and watering places. It appears that Sleeping Sickness has made little headway in Chua. At the close of the tour a conference was held at Tereteinia attended by the District Commissioner, Torrit; the Senior Medical Officer, Sleeping Sickness, Mongalla; the Officer-in-Charge, Chua District; the District Medical Officer, Chua; and myself to consider recommendations on the best way of dealing with a certain difficulty on the frontier.

### III. CONCLUDING REMARKS.

A great amount of work, mainly administrative, which requires detailed medical recommendations, still remains to be done on Lake Victoria, and in the Eastern Province especially. It has not yet been possible fully to supply all details required.



For the Northern and Western Provinces detailed medical recommendations were supplied before the middle of 1925, as a basis on which the revised "Instructions" which are needed could be drawn up, but these have not yet been promulgated. A centre for treatment has been established near Mjanji. In the Western Province more work requires to be done in the Bwamba and Katwe areas, and in the Northern Province the West Nile District requires more attention than can be given by the Senior Medical Officer posted to Arua.

There has been a very decided improvement in the Acholi area of Gulu District, but in certain parts of the Madi area there has been an equally decided increase in the amount of infection which can only be dealt with by therapeutic measures. Prophylactic clearing can effect nothing further, for with very few exceptions all places on streams frequented lawfully by people leading normal lives are adequately cleared. Nothing can be done to protect by clearings, hunters, or people who trespass into closed areas.

Treatment centres have been established in East and West Madi but it remains to be seen whether a single Medical Officer can cope with treatment and frequent inspection of all the population in Madi on both sides of the river. The situation in the Acholi area of Gulu District and in Chua can probably be controlled by the District Medical Officers.

#### STAFF.

At the commencement of the year the Senior Medical Officer, Sleeping Sickness, as in 1924, was the only Medical Officer available for purely Sleeping Sickness work. There were no Medical Officers at either Gulu or Kitgum. In March a District Medical Officer was appointed to Gulu but was transferred later in the year. In April a Medical Officer was appointed for work in the Victoria Nyanza infected area. In August a Medical Officer was appointed to Madi. In both these cases the appointments were primarily for Sleeping Sickness work.

A District Medical Officer was appointed to Tororo in Budama in June and another to Kitgum in August. I consider that the following minimal staff is necessary for dealing with Sleeping Sickness in addition to the present Senior Medical Officer, Medical Officer, Lake, and Medical Officer, Madi, and on the assumption that there are District Medical Officers at Gulu and Kitgum and Tororo:—

1. A second Medical Officer, Lake. He will be needed in June, 1926, to replace Dr. Griffin at Jinja when the Senior Medical Officer, Sleeping Sickness, goes on leave and Dr. Griffin acts for him.
2. A Medical Officer for work in the Lake Albert and the West Nile District of the Northern Province.
3. A Medical Officer for the Katwe and Bwamba areas in the Western Province.
4. A Medical Officer for work in the neighbourhood of the Mpologoma area in the Eastern Province.

It must also be stated that the work of the present Medical Officer, Madi, is much hampered by the absence of an Administrative Officer in that area, and that the new Medical Officers (2, 3, 4,) above mentioned will be in the same position unless the Administrative staff is stronger than it is at present.

**G. D. HALE CARPENTER,**

*Senior Medical Officer in charge Sleeping Sickness.*



APPENDIX TO REPORT OF SENIOR MEDICAL OFFICER,  
SLEEPING SICKNESS, FOR 1925.

**A Statistical Enquiry into the records of Fishing Permits issued on  
Lake Victoria since the middle of 1922.**

The investigations, whose results are tabulated below, were made in August and October, 1925, so that the records for 1925 are not complete and the figures for that year are therefore minimal. *Over 20,000 permits were examined and tabulated.* The system of control of fishing on the Lake Victoria was devised in 1922 by the Bacteriologist and described by him in his report for that year. It was realized that fishermen would be the first of all the population living on or near the Lake to show a return of human infection, inasmuch as they can go anywhere without let or hindrance provided that they carry a proper permit issued on payment of Shs. 2 every half year after medical examination. The form of permit is made out in duplicate, with space at the top for details of identity and finger print, and has below four slips, one for each half year, so that a form lasts for two years.

The applicant impresses his finger print on the top part of the original and duplicate forms at the time when he gives his name, etc., to the clerk who issues the permit. He then goes to a Medical Officer who sees him impress his finger print on the first of the four slips whereon he enters the results of examination of cervical and axillary glands. This procedure is to ensure that the person whose glands are examined is the proper person who obtained the permit and is intended to prevent fraud by anyone who, suspecting his glands to be enlarged, gives details of his identity to the clerk and deposes someone else to be medically examined for him. The duplicate part of the permit containing details of identity and the duplicate of the first slip attached to it are sent for record to the office of the Bacteriologist, the fisherman keeping the original permit and the duplicates of the slips for the next three half years. At each half year he again applies to the Medical Officer who enters thumb print and results of gland examination on a renewal slip, sending its duplicate to the office to be filed. As these slips are received at the office they are pasted on to the duplicate of the original issue until at the end of four half-yearly periods the complete history of the fisherman is on record. He then receives a new form, the serial number of the old one being entered on it so that the record shall be continuous.

In order to limit infection, should it occur, the whole of the lake was divided up into blocks, a fisherman being licensed for one block only. (List of these is given below). Should infection occur in one block it could (theoretically) be limited by withdrawal of all permits for that block. This requires a patrol to see that fishermen remain in the one block for which they are licensed, and there are eight inspectors furnished with canoes for that purpose who are the same men as issue the permits.

These inspectors, however, require constant supervision which has not been possible hitherto owing to lack of adequate motor transport on the lake. Opportunities for chicanery are of course ample at every step and the system, good in theory, requires much more supervision than has been possible hitherto.

During the second half of 1924 owing to various circumstances permits were not issued until nearly the end of the year. It was not considered necessary that men who had been medically examined so late in the year should be re-examined at the beginning of 1925 when the permits had to be renewed. Consequently the records of medical examinations for 1925A are not complete; a total of 968 permits for that period having to be recorded as "unclassified" as regards medical examination.

LIST OF FISHING AREAS.

From the western shore northwards and eastwards;—

- |              |                 |
|--------------|-----------------|
| A. Sango Bay | H. Kampala      |
| B. Bale      | I. Kasiriye     |
| C. Bukakata  | J. Sese         |
| *D. Luwera   | K. Buvuma       |
| *E. Katonga  | L. Jinja        |
| *F. Bussi    | M. Thurston Bay |
| G. Entebbe   | N. Mjanji.      |

\*The shores of these areas are mostly papyrus swamps so that contact with *palpalis* is practically negligible.



Table I. below, gives for each fishing area (I with K, and L with M, had to be taken together owing to confusion by the clerks issuing permits) and for each half year the number of permits issued, divided into two classes according to whether the glands of the applicants were only slightly or much enlarged. The applicant was classified by the sign showing *greatest* enlargement of any cervical or axillary gland on either side. This was done so that the classification should err on the side of safety; if only one gland of them all was much enlarged the applicant was tabulated ++ or +++. According to the Circular from the Director of Medical and Sanitary Services sent out in July, 1922, the following classification was adopted for the signs to be entered on the permits :—

- glands impalpable
- + glands palpable, not easily punctured
- ++ glands large, hard
- +++ glands large, soft, pulpy

and the appropriate record was to be made for the axillary and cervical glands of each side of the body separately.

TABLE I.  
SHOWING FOR EACH HALF YEAR THE RESULTS OF MEDICAL EXAMINATIONS IN EACH AREA, AND NUMBER OF PERMITS ISSUED.

½ year.	State of glands.				A.	B.	C.	D.	E.	F.	G.	H.	J.	I-K.	L-M.	N.	Total.
1922B	-, +.	...	...	...	493	338	53	230	138	56	480	298	708	277	230	23	3,324
	++, +++	...	...	...	115	79	31	18	35	17	59	22	98	23	5	20	522
	Not classed	...	...	...	1	...	...	...	2	...	1	1	2	2	...	...	9
	Total	...	...	...	609	417	84	248	175	73	540	321	808	302	235	43	3,855
1923A	-, +.	...	...	...	349	157	70	170	117	66	365	260	803	178	218	37	2,790
	++, +++	...	...	...	92	45	26	61	38	4	31	13	13	6	1	9	339
	Not classed	...	...	...	12	2	...	...	...	2	16	2	24	3	3	1	65
	Total	...	...	...	453	204	96	231	155	72	412	275	840	187	222	47	3,194
1923B	-, +.	...	...	...	392	329	83	185	87	69	396	258	693	318	151	40	3,001
	++, +++	...	...	...	87	67	15	65	31	10	64	16	57	31	1	4	448
	Not classed	...	...	...	18	...	...	...	2	2	7	12	68	7	6	1	123
	Total	...	...	...	497	396	98	250	120	81	467	286	818	356	158	45	3,572
1924A	-, +.	...	...	...	103	60	78	153	96	85	400	299	842	256	182	30	2,584
	++, +++	...	...	...	13	10	2	24	22	...	6	6	38	14	...	3	138
	Not classed	...	...	...	2	...	...	2	1	...	6	1	11	4	1	...	28
	Total	...	...	...	118	70	80	179	119	85	412	306	891	274	183	33	2,750
1924B	-, +.	...	...	...	190	91	65	71	48	80	380	220	602	168	174	64	2,153
	++, +++	...	...	...	4	...	...	1	...	5	13	7	18	11	4	2	65
	Not classed	...	...	...	2	...	...	1	1	1	6	2	5	9	2	...	29
	Total	...	...	...	196	91	65	73	49	86	399	229	625	188	180	66	2,247
1925A	-, +.	...	...	...	254	70	34	72	105	24	224	193	358	421	261	101	2,117
	++, +++	...	...	...	12	...	1	...	4	...	4	17	11	54	53	...	156
	Not classed	...	...	...	1	4	35	8	21	60	249	145	434	7	3	1	968
	Total	...	...	...	267	74	70	80	130	84	477	355	803	482	317	102	3,241
1925B	-, +.	...	...	...	17	257	...	50	17	89	513	195	12	54	...	...	1,204
	++, +++	...	...	...	2	13	...	3	1	1	10	55	...	9	...	...	94
	Not classed	...	...	...	...	2	...	1	...	1	2	7	6	3	...	...	22
	Total	...	...	...	19	272	...	54	18	91	525	257	18	66	...	...	1,320

TABLE II.  
SHOWING FOR EACH HALF YEAR THE NUMBERS OF ORIGINAL AND RENEWED PERMITS ISSUED.

½ year.				Originals.	Renewals.						Not classed.	Totals.
					1st.	2nd.	3rd.	4th.	5th.	6th.		
1922B	..	...	...	3,846	...	...	...	...	...	...	9	3,855
1923A	...	...	...	1,091	2,062	...	...	...	...	...	41	3,194
1923B	...	...	...	1,488	1,035	926	...	...	...	...	123	3,572
1924A	...	...	...	796	657	438	831	...	...	...	28	2,750
1924B	...	...	...	1,135	305	285	209	284	...	...	29	2,247
1925A	...	...	...	1,578	729	144	92	304	254	...	140	3,241
1925B	...	...	...	614	324	139	65	85	44	40	9	1,320
Totals				10,548	5,112	1,932	1,197	673	298	40	379	20,179



Table II, above, shows that a total of 10,548 persons are to have received fishing permits since the middle of 1922. This is slightly under the real total, as a few duplicates never reach the record office. It is evident that the number of individuals who steadily pursued their craft for period after period diminishes greatly after the first renewal (*i.e.*, after one year's fishing) until only 254 persons applied for 5th renewals in the first half of 1925. A person who stopped fishing for more than half a year and then commenced again was counted as a different individual.

The figures for the second half of 1925 are not complete, since at the time when the records were investigated all duplicates had not yet been returned to the office, but 40 persons had already applied for the sixth renewal.

The total number of permits (originals and renewals) issued from 1922 to the end of the first half of 1925 and available for inspection shows that, at the rate of Shs. 2 for every half year a revenue had been derived of Shs. 37,718 and that the average revenue for each half year from the middle of 1922 to the end of the first half of 1925 was Shs. 6,286. This is actually somewhat below the correct figure since the calculations were made from only those permits filed in the record office, and a very small proportion never get there.

TABLE III.

SHOWING PERCENTAGE OF ENLARGED GLANDS (++) OR (+++) IN EACH AREA FOR EACH HALF YEAR.

Glands slightly enlarged (+) are not included, owing to differences of opinion between Medical Officers as to whether certain glands should be classed as normal (—) or slightly enlarged (+). A personal equation thus introduced must be disregarded. For the compilation of this table no data less than 20 were taken into consideration. In certain areas the data obtained were too few to give percentages worth reckoning, such are the Katonga (E) area, the Bussi (F) area, the Jinja and Thurston Bay areas and (M) and the Mjanji (N) area.

It is unfortunate that the last three mentioned areas cannot be included, since N is known to be infected and comparison between it and clean areas would have been of great value.

A—signifies that data were insufficient.

Area	Half year	Original issues.	1st	2nd	3rd	4th	5th	6th Renewal.
A (SANGO BAY)...	1922B ...	19%						
	1923A ...	20 ...	21%					
	1923B ...	17 ...	15	19%				
	1924A ...	8 ...	9	—	12%			
	1924B ...	2 ...	2	—	—			
	1925A ...	6 ...	4	—	—	—	—	—
B (BALE) ...	1922B ...	19% ...						
	1923A ...	— ...	23%					
	1923B ...	13 ...	18	23%				
	1924A ...	— ...	25	—	13%			
C (BUKAKATA)...	1922B ...	37%						
	1923A ...	34 ...	23%					
	1923B ...	10 ...	21	17%				
	1924A ...	— ...	4	—	4%			
D (LUWERA) ...	1922B ...	7%						
	1923A ...	21 ...	28%					
	1923B ...	25 ...	26	26%				
	1924A ...	5 ...	15	10	18%			
G (ENTEBBE) ...	1922B ...	11%						
	1923A ...	8 ...	8%					
	1923B ...	10 ...	12	15%				
	1924A ...	1 ...	1	3	2%			
	1924B ...	3 ...	2	3	3	4%		
	1925A ...	2 ...	—	—	—	—	—	—
	1925B ...	2 ...	2	1	—	—	—	4%

Area.	Half year.	Original issue.		1st	2nd	3rd	4th	5th	6th Renewal.
H (KAMPALA) ...	1922B ...	7%							
	1923A ...	5	...	4%					
	1923B ...	6	...	7	...	4%			
	1924A ...	2	...	1	...	5	...	0	
	1924B ...	4	...	2	...	4	...	4	...
	1925A ...	7	...	—	...	—	...	—	...
	1925B ...	18	...	28	...	6	...	—	...
J (SESE) ...	1922B ...	12%							
	1923A ...	2	..	1%					
	1923B ...	8	...	10	...	6%			
	1924A ...	3	...	4	..	7	...	3%	
	1924B ...	2	...	1	...	3	...	5	...
	1925A ...	3	...	5	...	3	...	0	...
I + K (KASIRIYE AND BUVUMA).									
	1922B ...	8%							
	1923A ...	4	...	2%					
	1923B ...	9	...	8	...	6%			
	1924A ...	6	...	5	..	3	...	9%	
	1924B ...	1	...	14	...	8	...	—	...
	1925A ...	11	...	14	...	13	...	7	...
	1925B ...	9	...	—	...	—	...	—	...

Variations show in each column of figures, read vertically, when large may be interpreted as possibly due to the personal equation before mentioned, seeing that the Medical Officer of any district was not the same from the second half of 1922 to the second half of 1925.

The value of Table III is based on the presumption that in any area contact with *palpalis*, were they infected with a human strain of *Trypanosome*, would cause a certain increase in the size of the lymphatic glands and that the fishermen in such an area would show a definite increase in the percentage of enlarged glands for a period following the date when human infection was sufficiently frequent to be so revealed.

The figures read horizontally for each half year suggest that such human infection has not occurred. For instance in the Entebbe and Sese areas medical examinations for the fourth renewal (*i.e.*, after the fishermen had been in contact with *palpalis* for four half years in the second half of 1924 showed that there was no increase in the percentage of enlarged glands, and in the Entebbe area even six half years had produced no increase among the 25 men who applied for a sixth renewal. In addition it may be stated that except in the Mjanji area microscopic examination of enlarged glands has shown Trypanosomes in no case.

The Luwera area (D) in the N.W. corner of the lake is interesting since from the nature of its swampy papyrus-lined shores there can be very little contact with *palpalis*. Yet this area seems to show a definite slight increase in the percentage of enlarged glands, and it is permissible to suppose that irritation from bites of mosquitoes may be a cause. Unfortunately, similar swampy fishing grounds, such as Bussi, provided too few data to enable a comparison to be made.

G. D. HALE CARPENTER,

Senior Medical Officer in charge Sleeping Sickness.

*Note.*—In the Bacteriologist's report for 1922 a brief analysis of the records up to date was given. In his report for 1923 the numbers of licences issued and of men fishing were given, and in 1924 the number of men fishing for that year was given.

G. D. H. C.



## APPENDIX No. VII.

**Annual Report of Government Dental Surgeon.**

SIR,

I have the honour to submit to you my Annual Report for 1925. The Report only takes in four complete months of the year, as I was on leave for eight.

The following tables give the treatment of officials :—

(i)	Appointments...	...	...	...	...	...	512
	Officials treated	...	...	...	...	...	191

(ii) The following conditions were treated :—

Caries Simplex	...	245	Periodontitis	...	...	22
Extractions	..	87	Erosion	...	...	28
Pulpitis	...	26	Gingivitis	...	...	8
Abscess	...	19	Stomatitis	...	...	3
Odontalgia	...	4				

(iii) Conservation work :—

Ag. Amalgam	...	153	Temp. Gutta Percha with dressings	...	71
Synthetic Porcelain	...	42	Scaling and Cleaning	...	91
Cement	...	26	Silver Nitrate applications	...	25
Per. Gutta Percha...	...	11			

(iv) Prosthetic work :—

Dentures	...	24	Crowns	...	...	21
Repairs to Dentures	...	39	Bridge	...	...	1

(v) The following stations beyond Kampala and Entebbe were visited :—

Jinja two visits ; Masindi, Hoima, Butiaba and Arua one visit each.

I have the honour to be,

Sir,

Your obedient servant,

**G. STANLEY BATEMAN,**  
*Government Dental Surgeon.*

THE HONOURABLE

THE DIRECTOR OF MEDICAL AND SANITARY SERVICES,  
UGANDA.

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